RAILROAD

DEC 2 VAN

MAGAZINE | FEBRUARY 50c

SP NARROW GAGE

I Deliver Diesels

Holdups That Misfired

MAIL ORDER BUSINESS

Your Big Opportunity!

34-lesson course on proved, tested, up-to-date, **profitable** methods. Amazing treasure-house of the best mail order plans and practices. How to start your mail order business on a small one-man scale . . . how to keep it growing more and more profitable month after month. Money-making *facts*. Full price only **$9.95.** Satisfaction guaranteed or refund. Circle below **No. 40** for Mail Order Course.

5 ACRES *and* INDEPENDENCE

How to Buy a Small Farm and Run It PROFITABLY!

SECURITY is yours when you own a few acres and use them wisely. You supply your own food requirements and possibly enough extra to enjoy a comfortable cash income. Teaches you practical things you want to know about livestock, farming, poultry, orchards, etc. Only **$4.95.** Order 'Farming' **No. 4** in coupon.

ART SCHOOL *Self-Taught*

Learn at home in your spare-time. Enjoy this up-to-date self-instruction training while you prepare yourself for a fascinating career in art!

NO PREVIOUS ART TRAINING NECESSARY

These excellent lessons guide you step by step. Teach drawing: perspective, still life, landscapes; painting: oil, water, gouache and tempera, female figure; sculpture: wood modeling, etc. Circle **No. 1** in coupon at bottom of this page. Satisfaction or money back guaranteed. Complete price only **$9.95.**

How to Run a RESTAURANT...

Get into a Good MONEY-MAKING BUSINESS of *Your Own!*

Virtually a complete self-instruction course on starting and operating profitable luncheonettes, cafeterias, diners, tea rooms, etc. Teaches you the all-important facts about leases, licenses, equipment, furnishings, decorating, kitchen arrangement, menu-planning, etc. How to make money!

FULL PRICE, Only $6.95, Postpaid

This could be your BIG chance! Satisfaction guaranteed or money back. Order "How to Run a Restaurant." **No. 2** in coupon below.

PUBLIC SPEAKING FOR SUCCESS

HOW TO HANDLE PEOPLE

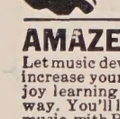
Oratory and public speaking is an art which **must be learned.** Don't you believe bunk about "natural born" speakers! For your greater personal advancement let this excellent course teach you the fundamentals of influencing people: how to make them laugh, cry and ACT. Only **$8.95.** Circle **No. 3** in coupon below. Satisfaction or refund.

PIANO TUNING

Experienced piano tuners charge up to $10.00 for a job they finish in about an hour. Repeat business, too! You can start training for this profitable field **right now.** It is NOT necessary that you play piano . . . you don't even have to understand music at all.

SELF-INSTRUCTION COURSE — only $4.95 complete price. This excellent home-study course includes instructions on piano regulating, repairing —other servicing operations every good piano tuner knows. Also covers electric organs, tuning by Stroboscope, etc. Good, clear, helpful illustrations to guide you step-by-step. Money-Back Guarantee. Order 'Piano Tuning'. Only **$4.95.** Circle **No 7.**

HOW TO BUY, SELL, TRADE OLD GOLD, ETC. A new-to-the-point Technical Bulletin to teach you how to make money dealing in precious metals—broken jewelry, old gold, silver, platinum, etc. Enormous opportunities for those with experience. Only **$1.00.** Order "Old Gold." **No. 20** in coupon below. Guaranteed!



HOW TO GET A GOOD JOB

Shows you step-by-step the successful techniques of up-grading yourself into a better position in any field. Teaches you how to SELL yourself to a new employer for the highest price. A Practical 36-Lesson Course. Full price only **$4.95.** Satisfaction or refund guaranteed. Circle **No. 43** in coupon for 36-lesson course.

AMAZE Your Friends

Let music develop your personality—increase your popularity. You'll enjoy learning this tested, short-cut way. You'll learn by playing REAL music, with BOTH hands, right from the very FIRST lesson. This is NOT a trick system—but it IS a genuine piano course that's lots of FUN. Satisfaction or refund guaranteed! Complete price only **$8.95** postpaid. Circle **No. 53** in the coupon below.

***How to be a* BARTENDER and the Art of Mixing Drinks**

Professional information for the liquor trade and man-about-town. Details on mixing and serving 300 most popular drinks. PRACTICAL instruction for working behind the bar. How to handle and use spirits, wines, beers. **Trade secrets** on the care of bottles, glassware, mirrors, utensils. How to make syrups; bottle in bulk, prepare fruit. Excellent illustrations. Also includes appropriate toasts for good fellows. Only **$1.95.** Order 'Bartender' **No. 32.**

LOCKSMITHING & Key Making

PRACTICAL UP-TO-DATE COURSE!

ONLY $5.95 COMPLETE—Teaches you the **professional** "secrets." How to pick locks, de-code, make masterkeys, install and service key systems, etc. Step-by-step detailed, illustrated instructions make every operation crystal clear. Money-making information for carpenters, mechanics, hardwaredealers, gunsmiths, cycle shops, maintenance men, etc. 53 lessons! Satisfaction guaranteed or your money back. Order "Locksmithing Course." **No. 6** in coupon. Only **$5.95.** Mail coupon today!

Learn YOGI! *The Art of SELF MASTERY*

Practical Course—ONLY $5.95 Complete

Yogism aids your self-confidence, will-power, self-control. Helps your personal efficiency. Points out time-tested methods for a happier, more **successful** life...based on modern scientific discoveries plus ancient Yoga Secrets for releasing your deeper powers. Practical, valuable for everyday use by busy, level-headed Americans. **Send No Money.** Pay postman $6.95 plus COD, or send **$5.95** for postpaid shipment. Satisfaction or refund guaranteed. Send for this "Practical Yoga Course"! **No. 22** in coupon.

Make the Most of What You've Got!

STOP FORGETTING!

How To Develop Your Memory And Put It To Practical Use

Teaches you how to remember by teaching you how to do CLEAR, ORDERED thinking, speaking and working. Not a "trick system" but virtually a self-instruction course in **concentration** and straight thinking. Learn how successful people retain, recall and USE information, knowledge and facts. This information worth its weight in gold. Full price only **$4.95.** Order "Memory Course." **No. 23** in coupon!

How to Use BETTER ENGLISH

in Your Letters and Conversation

Daily YOU are being judged by the language you use. Your other abilities, however great, are generally discounted if your English is faulty. So don't let your shaky English hold you back in business or social life. **Improve your speech and writing** by studying these interesting, PRACTICAL lessons. Teaches you how to increase your vocabulary—learn new words and use them right. How to spell and pronounce correctly. Secrets of good letter-writing and entertaining conversation. Full price ONLY **$4.95.** Satisfaction or refund guaranteed. Order 'Correct English.' Circle **No. 30** in coupon below.

HAPPINESS IN MARRIAGE Written by a physician! Intelligent men and women can now get the modern, helpful, scientific facts they want about sex and the love life. Virtually an encyclopedia of Sex, the Journal of the American Medical Association says it "ranges the entire gamut of sex subjects from birth, thru adolescence, marriage, sexual aberration and disease, and rejuvenation." A really **great** work! Order "Sex Happiness in Marriage." Only **$3.95.** Just circle **No. 24** in the coupon.

How to Write Songs—

A PRACTICAL COURSE IN LYRICS—MUSIC—SELLING

Best selling hit songs often are written by those who know only the special "techniques" or **secrets.** You don't have to spend long dreary years studying theoretical music in order to do popular songs the public goes wild over. If you have the stuff inside of you to begin with . . . this **practical** course will teach you how to get it down on paper and will teach you exactly how and where to offer it for sale. ONLY **$4.95.** Satisfaction or refund guaranteed. Order "Song Writing." **No. 26** in coupon.

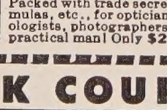
REVEALS to you the fundamentals of **Practical** Hypnotism. Amazing illustrated lessons. Big 280-page treatise jam-packed with fascinating information. In simple understandable language you will enjoy. Full price only **$3.95.** Satisfaction or refund guaranteed. Order "Hypnotism" today. **No. 27** in coupon below.

EUGENE FEUCHTINGER'S HINTS ON VOICE DEVELOPMENT

Basic exercises designed to *strengthen* your vocal organs and *improve* your voice. These new self-instructions include the most important parts from the world-famed voice course put out by the Prefect Voice Institute. Full Price, only **$2.95.** In coupon below circle **No. 28.** Order "Voice Development."

HOW TO SING FOR MONEY—Teaches you the art and business of singing popular songs professionally. **Practical** course written by ASCAP-member Charles Henderson, one of Hollywood's top-flight vocal coaches—who has worked with Bing Crosby, Dinah Shore, Frances Langford, Kenny Baker, etc. These short-cuts to success teach you how to make the most of what you've got! Full price, ONLY **$4.95.** Order "How to Sing for Money." Circle **No. 29** in coupon below.

SWEDISH BODY MASSAGE



Course of instruction in the Art of Body **Massage** and Hydrotherapy. Contains information on fundamentals of anatomy, physiology, procedure for complete massage, approved exercises, etc. Includes business advice. This valuable study may open door to a basic knowledge of the profession. Only **$11.95,** complete. Order "Body Massage." **No. 15** in coupon. Satisfaction guaranteed.

JEWELERS & WATCHMAKERS Cyclopedia

Packed with trade secrets, manufacturing processes, little-known formulas, etc., for opticians, stone setters, engravers, case makers horologists, photographers and others. 1001 money-making ideas for the practical man! Only **$2.49.** Order "Jewelers Cyclopedia." **No. 18.**

watch and clock repairing

PRACTICAL COURSE IN HOROLOGY

Learn at home spare time. How-to-do-it lessons for beginners as well as those already in the trade. Thorough self-instruction training in the fundamentals of American and Swiss timepieces. Contains a wealth of helpful photos, drawings, diagrams, charts, etc. Only **$7.95** for everything! Order "Watch & Clock Repairing." **No. 5** in coupon. Satisfaction or refund guaranteed.

World-Famous Health and Medical Texts

TROUBLES WE DON'T TALK ABOUT—All about piles, etc. Only **$4.95.** Circle **No. 55** in coupon at bottom of page.

NERVOUS STOMACH TROUBLE—for victims of high tension modern living. Only **$4.95.** Circle **No. 58** in coupon.

CONSTIPATION—How To Combat It—Practical advice and valuable warnings. Only **$4.95.** Circle **No. 59** in coupon.

SUPER JU JITSU

Now get tough double quick!

A course of instruction in the art of practicing and using this method of applying LIGHTNING-QUICK Super Ju Jitsu. Be Dangerous! These amazing lessons show you how it's done . . . in a big illustrated home-study course. The weapons are just your BARE HANDS—they can be used effectively if you know how and practice the art. Easy to learn; quick. Full 76-lesson course only **$9.95** postpaid. Satisfaction or money back. Circle **No. 38** in coupon below.

MAKE MONEY in STOCK MARKET

This Guide to Profitable Investment will show you how to save money...show you how to make money work for you. Nationally known expert advises you how to buy and sell stocks and bonds for profit. Very practical—names names! Written for the average investor. Full price only **$6.47.** Circle **No. 62** in coupon below. Satisfaction guaranteed.

Learn UPHOLSTERING

Start by doing work on your own furniture to save money & beautify your home. Then branch out as you gain experience. You'll learn quickly and enjoy these step-by-step illustrated lessons. Easy-to-follow instructions on how to create, repair and remodel practically all kinds of upholstered furniture. You get everything for only **$9.95,** complete. Satisfaction or money back. Order "Upholstering." **No. 9** in coupon.

Cure SELF-CONSCIOUSNESS

How to develop a strong, positive personality—get rid of timidity, bashfulness, shyness and fear. Successful self-instruction lessons based on new principles of practical psychology. Healthy self-confidence can be yours! Complete course of 22 home-study lessons. **NOT a book.** Full price only **$8.95,** postpaid, or COD plus postage. Mailed in plain wrapper. Satisfaction guaranteed or refund. Order "Curing Self-Consciousness Course" today. Circle **No. 41** in coupon at bottom of page.

HOW TO GET ALONG IN THIS WORLD . . .

Boiled down, **practical** tips on Success! Here, gathered together for the first time, are 5,000 gems of worldly wisdom on how to live fully, joyously, successfully . . . how to handle people, make money, be happy. Most interesting—and useful. Only **$1.95** complete. Order "How to Get Along in This World." Circle **No. 33** in coupon below.

APARTMENT HOUSE MANAGEMENT Wonderful field for ambitious men and women, especially those over 40. Experienced managers have steady work, good pay and SECURITY. Satisfaction or money back guaranteed. Complete, only **$8.95.** Course **No. 8** in coupon below.

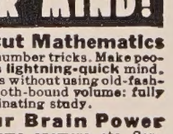
POULTRY RAISING

Practical, workable instructions on how to start a chicken flock in your back yard or on a small farm. Teaches you how to do egg farming efficiently, pleasantly—**and profitably!** Explains every detail of poultry raising, step-by-step. Only **$4.95** complete. Order "Poultry Raising." **No. 13** in coupon. Satisfaction or refund!

BUSINESS LAW SHOWS YOU HOW to avoid trouble and get ahead faster. Valuable legal information for ambitious men who want to be even more successful in business. It teaches MODERN law for practical use TODAY! In understandable language you are introduced to many important principles and fundamentals of the law. Full price only **$8.97.** Circle **No. 34** in coupon.

SHOE REPAIRING COURSE New, well-illustrated, step-by-step series of lessons on how to rebuild shoes. Written for the beginner who wants to go into business or the family man who wants to save money by doing his own shoe repairing. Full price, only **$6.95.** Satisfaction guaranteed. Order "Shoe Repairing Course." Circle **No. 44** in coupon below.

Complete Practical Blueprint Reading Course



Interesting, simplified self-instruction lessons for builders, mechanics, electricians, etc. 24 volumes, including over 500 actual blueprints, diagrams and step-by-step drawings. FULL PRICE ONLY **$11.95.** Unusual bargain! Satisfaction or refund guaranteed. Order "Blueprint Reading Course." **No. 16** in the coupon.

MASTER MIND!

Learn Short-Cut Mathematics

Juggle figures, do baffling number tricks. Make people gasp at your marvelous **lightning-quick** mind. Multiply 4 figures without using old-fashioned multiplication! Big cloth-bound volume: fully illustrated course. A fascinating study.

Sharpen Up Your Brain Power

Includes worked-out problems, answers, etc. Sensational bargain, only **$3.95,** postpaid—or C.O.D. plus postage. Satisfaction guaranteed or refund. Order this amazing "Short-Cut Mathematics" today. Simply circle **No. 11** in coupon. Then clip and mail.

MAIL THIS NO-RISK COUPON TODAY!

NELSON-HALL COMPANY, Dept. A-R5
210 South Clinton Street, Chicago 6, Ill.

Please rush me the practical concentrated courses I have circled below. I understand each is complete and that this is the full price, nothing more for me to pay. I have the right to examine everything you send me for 10 full days. Then if I am not ***more*** than satisfied in every way I will return the material and you ***guarantee*** to make complete immediate refund, without question or quibble. (Draw a circle around the number of each course you want.)

1	2	3	4	5	6	7	8	9	11	13	15
16	18	20	22	23	24	26	27	28	29	30	32
33	34	38	40	41	43	44	53	55	58	59	62

☐ I enclose $_____ in full payment. Ship entirely postpaid.
☐ Ship C.O.D. for $_____ plus postage.

NAME_____

ADDRESS_____

CITY_____ STATE_____

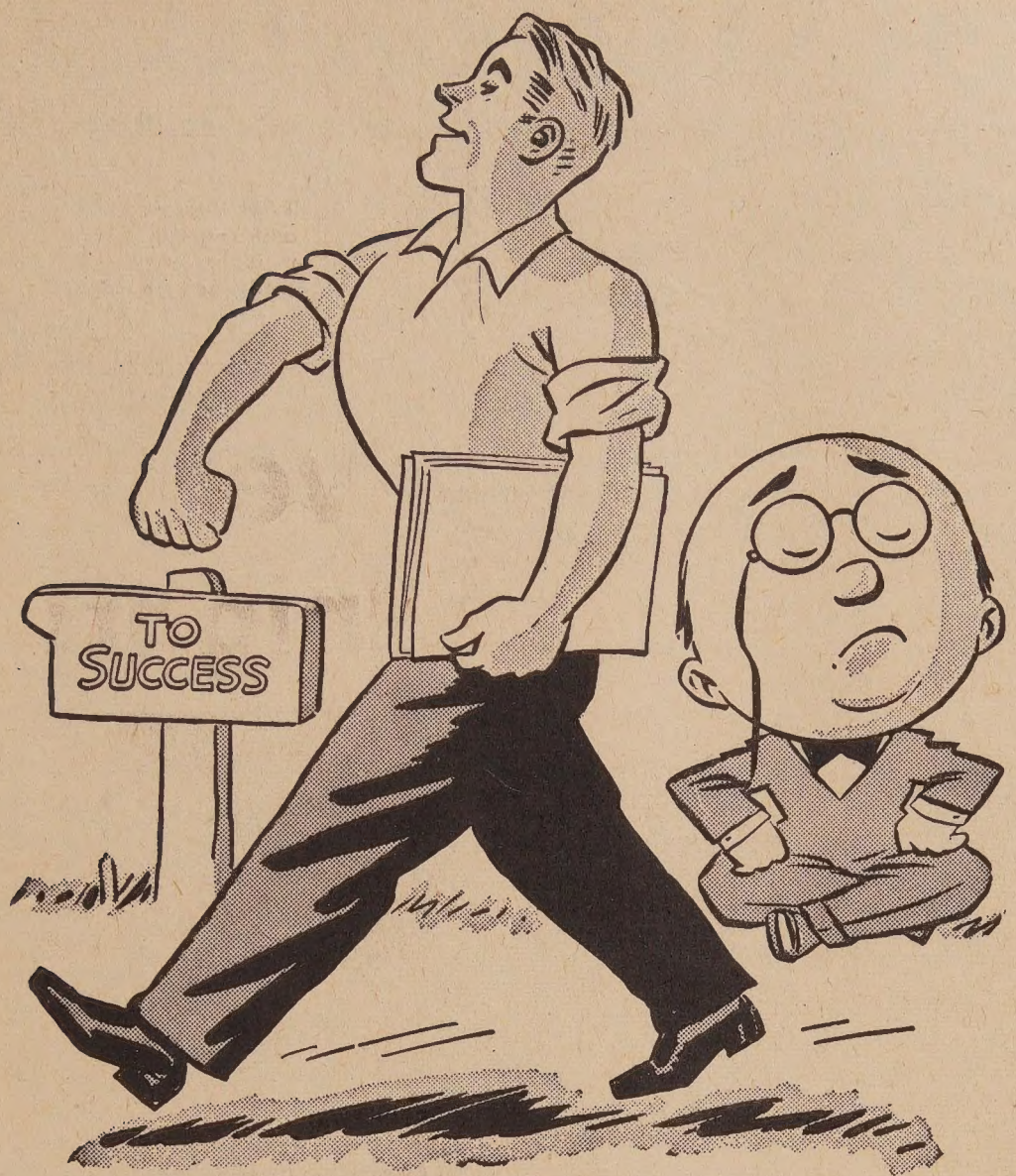
☐ Check here if above order is for two or more numbers. In this case we send you, **without extra charge,** a fine educational volume as a bonus. You'll be delighted with this excellent gift. And it is yours to keep, free, even if you return the courses after inspection. MAIL this coupon NOW—this special bonus offer is subject to cancellation when our present stock runs out.

IT'S EASY TO ORDER In coupon draw a circle around the number of each course you want us to send you. Print your name and full address clearly, then mail coupon right away. Send full payment with your order and we'll prepay all postage charges—on C.O.D. shipments you pay charges. Satisfaction or refund guaranteed . . . you take no risk.

FREE!! Select two or more courses from this page and we will include an **EXTRA** educational item as a special bonus . . . without any additional cost to you! You may ***keep*** this excellent Dividend Item, as your own, even should you send back for refund the courses you order. We reserve the right to withdraw this unusual offer when present limited stock is gone. Don't lose out—***mail coupon today!***

NELSON-HALL CO., *(Established 1909)*
210 S. Clinton St., Dept. A-R5 **, Chicago 6, Ill.**

How to pass a genius



All of us can't be geniuses. But any ordinarily talented mortal can be a success—and that's more than some geniuses are.

Now, as in Æsop's time, the race doesn't always go to the one who potentially is the swiftest. The *trained* man has no trouble in passing the genius who hasn't improved his talents.

In good times and bad times, in every technical and business field, the *trained* man is worth a dozen untrained ones, no matter how gifted.

The International Correspondence Schools can't make you into a genius. For more than 60 years, however, I. C. S. has been helping its students to become *trained, successful leaders*—and it can do the same for you.

Mark your special interest on the coupon. Don't be like the unsuccessful genius who wastes his life in dreaming of what he intends to do. *Act* now!

For Real Job Security—Get an I. C. S. Diploma! **I. C. S., Scranton 15, Penna.** **Accredited Member, National Home Study Council**

INTERNATIONAL CORRESPONDENCE SCHOOLS

ICS

BOX 59098M, SCRANTON 15, PENNA. (Partial list of 259 courses)

Without cost or obligation, send me "HOW to SUCCEED" and the opportunity booklet about the field BEFORE which I have marked X (plus sample lesson):

ARCHITECTURE and BUILDING CONSTRUCTION
- ☐ Air Conditioning
- ☐ Architecture
- ☐ Arch. Drawing and Designing
- ☐ Building Contractor
- ☐ Building Estimator
- ☐ Carpentry and Millwork
- ☐ Carpenter Foreman
- ☐ Heating
- ☐ Interior Decoration
- ☐ Painting Contractor
- ☐ Plumbing
- ☐ Reading Arch. Blueprints

ART
- ☐ Commercial Art
- ☐ Magazine & Book Illus.
- ☐ Show Card and Sign Lettering
- ☐ Sketching and Painting

AUTOMOTIVE
- ☐ Automobiles
- ☐ Auto Body Rebuilding and Refinishing
- ☐ Auto Engine Tuneup
- ☐ Auto Technician

AVIATION
- ☐ Aero-Engineering Technology
- ☐ Aircraft & Engine Mechanic

BUSINESS
- ☐ Accounting
- ☐ Advertising
- ☐ Business Administration
- ☐ Business Management
- ☐ Cost Accounting
- ☐ Creative Salesmanship
- ☐ Managing a Small Business
- ☐ Professional Secretary
- ☐ Public Accounting
- ☐ Purchasing Agent
- ☐ Salesmanship
- ☐ Salesmanship and Management
- ☐ Traffic Management

CHEMICAL
- ☐ Analytical Chemistry
- ☐ Chemical Engineering
- ☐ Chem. Lab. Technician
- ☐ Elements of Nuclear Energy
- ☐ General Chemistry
- ☐ Natural Gas Prod. and Trans.
- ☐ Petroleum Prod. and Engr.
- ☐ Professional Engineer (Chem)
- ☐ Pulp and Paper Making

CIVIL ENGINEERING
- ☐ Civil Engineering
- ☐ Construction Engineering
- ☐ Highway Engineering
- ☐ Professional Engineer (Civil)
- ☐ Reading Struc. Blueprints
- ☐ Structural Engineering
- ☐ Surveying and Mapping

DRAFTING
- ☐ Aircraft Drafting
- ☐ Architectural Drafting
- ☐ Drafting Machine Design
- ☐ Electrical Drafting
- ☐ Mechanical Drafting
- ☐ Sheet Metal Drafting
- ☐ Structural Drafting

ELECTRICAL
- ☐ Electrical Engineering
- ☐ Elec. Engr. Technician
- ☐ Elec. Light and Power
- ☐ Practical Electrician
- ☐ Practical Lineman
- ☐ Professional Engineer (Elec)

HIGH SCHOOL
- ☐ High School Diploma
- ☐ Good English
- ☐ High School Mathematics
- ☐ Short Story Writing

LEADERSHIP
- ☐ Industrial Foremanship
- ☐ Industrial Supervision
- ☐ Personnel-Labor Relations
- ☐ Supervision

MECHANICAL and SHOP
- ☐ Diesel Engines
- ☐ Gas-Elec. Welding
- ☐ Industrial Engineering
- ☐ Industrial Instrumentation
- ☐ Industrial Metallurgy
- ☐ Industrial Safety
- ☐ Machine Design
- ☐ Machine Shop Practice
- ☐ Mechanical Engineering
- ☐ Professional Engineer (Mech)
- ☐ Quality Control
- ☐ Reading Shop Blueprints
- ☐ Refrigeration and Air Conditioning
- ☐ Tool Design ☐ Tool Making

RADIO, TELEVISION
- ☐ General Electronics Tech.
- ☐ Industrial Electronics
- ☐ Practical Radio-TV Eng'r'g
- ☐ Practical Telephony
- ☐ Radio-TV Servicing

RAILROAD
- ☐ Car Inspector and Air Brake
- ☐ Diesel Electrician
- ☐ Diesel Engr. and Fireman
- ☐ Diesel Locomotive

STEAM and DIESEL POWER
- ☐ Combustion Engineering
- ☐ Power Plant Engineer
- ☐ Stationary Diesel Engr.
- ☐ Stationary Fireman

TEXTILE
- ☐ Carding and Spinning
- ☐ Cotton Manufacture
- ☐ Cotton Warping and Weaving
- ☐ Loom Fixing Technician
- ☐ Textile Designing
- ☐ Textile Finishing & Dyeing
- ☐ Throwing
- ☐ Warping and Weaving
- ☐ Worsted Manufacturing

Name_____ Age_____ Home Address_____

City_____ Zone_____ State_____ Working Hours_____ A.M. to P.M._____

Occupation_____

Canadian residents send coupon to International Correspondence Schools, Canadian, Ltd., Montreal, Canada. . . . Special tuition rates to members of the U. S. Armed Forces.

RAILROAD MAGAZINE

THE MAGAZINE OF ADVENTUROUS RAILROADING—FOUNDED 1906

VOL. 70, NO. 2 FEBRUARY, 1959 50 CENTS

FREEMAN HUBBARD
Editor

P. C. GRAVES
Associate Editor

BERNARD WHITE
Art Director

BARBARA KREIMER
Information Booth

STEVE MAGUIRE
Transit Topics

SY REICH
R.R. Hobby Club

ILLUSTRATED FEATURES

World's Greatest Dome ..... Freeman Hubbard 6
Photos of the Month 13
I Deliver Diesels ..... John W. McElhinney 18
Holdups That Misfired ..... Jack Maguire 22
SP Narrow-Gage ..... Freeman Hubbard 26
New Haven Electrification ..... Sy Reich 30
New Jersey Shortlines ..... Sy Reich 44

FICTION

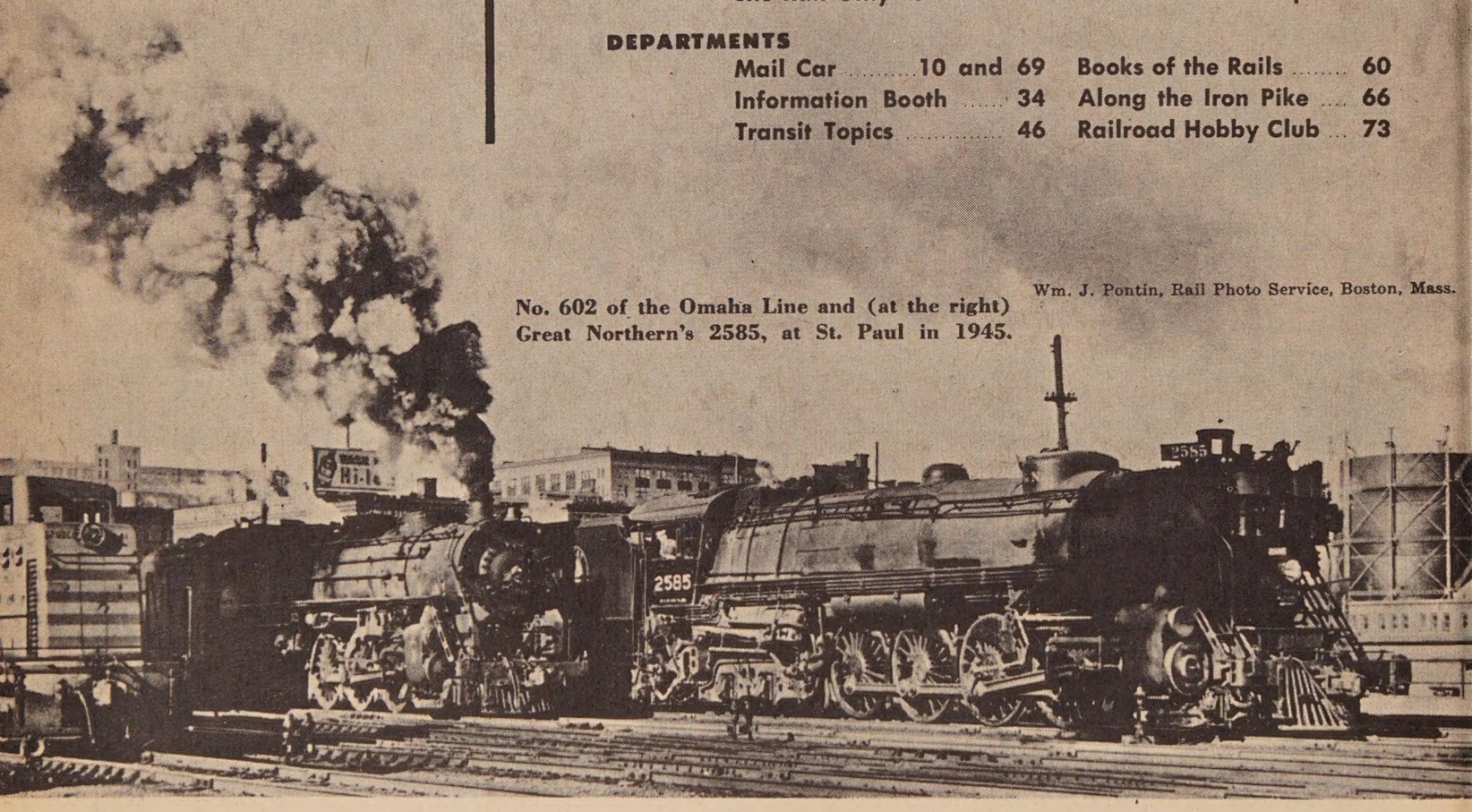
Delay at Mesquite ..... Harry Bedwell 50

SHORT HAULS

Steam Today in Alabama ..... Thomas Lawson, Jr. 62
Chesapeake & Ohio Locomotives ..... Sy Reich 64
She Ran Only in Winter ..... William G. Westphal 67

DEPARTMENTS

Mail Car ..... 10 and 69
Information Booth 34
Transit Topics 46
Books of the Rails 60
Along the Iron Pike 66
Railroad Hobby Club 73



No. 602 of the Omaha Line and (at the right) Great Northern's 2585, at St. Paul in 1945.

Wm. J. Pontin, Rail Photo Service, Boston, Mass.

HENRY STEEGER, *Publisher*
THOMAS HARRAGAN, *Associate Publisher*
P. J. GLEASON, *Production Manager*
IRA MOSHIER, *Newsstand Sales Manager*
JOSEPH MUCCIGROSSO, *Subscription Manager*

ADV. REPRESENTATIVES
Wilson & Stark, 40 East 50th St., New York, N. Y.
Harley L. Ward, Inc., 360 North Michigan Ave., Chicago, Ill.
Houston & Walsh, 111 North La Cienega Blvd., Beverly Hills, Calif.

CHANGE OF ADDRESS: POSTMASTER—Please mail Form 3579 notices to: RAILROAD, 205 East 42nd Street, New York 17, N. Y.

Published bi-monthly by Popular Publications, Inc., at 1250 Camden Ave., S.W., Canton 6, Ohio. Editorial and executive offices, 205 East 42nd Street, New York 17, N. Y. Henry Steeger, President; John J. McVarish, Treasurer. Second-class postage paid at Canton, Ohio.

Copyright 1958 by Popular Publications, Inc. This issue is published simultaneously in the Dominion of Canada. Copyright under International Copyright Convention and Pan-American Copyright Conventions. All rights reserved, including the right of reproduction, in whole or in part, in any form. Title registered in U.S. Patent Office.

Single copy, 50c. Subscription for U.S.A., its possessions, and Canada, $5.00 for 12 issues. Other countries, $6.00. When submitting manuscripts, enclose stamped, self-addressed envelope for their return, if found unacceptable. The publishers will exercise care in the handling of unsolicitd manuscripts, but assume no responsibility for their return. Printed in U.S.A.

To those who want to enjoy an

ACCOUNTING CAREER

If you're that person, here's something that will interest you.

Not a magic formula—not a get-rich-quick scheme—but something more substantial, more practical.

Of course, you need something more than just the desire to be an accountant. You've got to pay the price—be willing to study earnestly, thoroughly.

SAMPLE LESSON SENT FREE

Still, wouldn't it be worth your while to sacrifice some of your leisure in favor of interesting home study—over a comparatively brief period? Always provided that the rewards were good—a salary of $5,000 to $10,000 and up?

5 Reasons Why Accounting Offers You MORE MONEY AND SUCCESS

REASON #1. If you were an expert accountant right now, chances are you would find yourself in one of the best-paid fields of business.

REASON #2. The demand for accountants is great—everywhere. All businesses must have trained accountants to cope with ever-growing requirements. It's a field offering wide opportunity—always—to the man who knows. The accountant's duties are interesting, varied, and of real worth to his employers. He has standing.

REASON #3. You can fit into any business, anywhere in the country—because accounting principles are universal. Think what this means in terms of security and independence!

REASON #4. Accounting is open to all. Any man or woman of good intelligence, who enjoys figure work and is willing to follow LaSalle's systematic "problem method" plan, can rapidly qualify for a highly profitable, enjoyable lifetime career...and he doesn't have to finish his training before beginning to "cash in."

REASON #5. Without losing a day from your present work, you can prepare in spare hours at home, at low cost. LaSalle has trained one out of every 13 of all the Certified Public Accountants in the U.S....and many thousands of others who are now enjoying high-paying careers.

YOU "LEARN BY DOING" THROUGH LASALLE'S PROBLEM METHOD

Just suppose you were permitted to work in an accounting firm under the personal supervision of an expert accountant. Suppose, with his aid, you studied accounting principles and solved problems day by day—easy ones at first—then more difficult ones. If you could do this—and could turn to him for advice as the problems became complex—soon you'd master them all.

That's the training you follow in principle under the LaSalle Problem Method.

You cover accounting from Basic Accounting right through advanced accounting, and Certified Public Accountant Training.

Your progress is as speedy as you care to make it—depending on your own eagerness to learn and the time you spend in study.

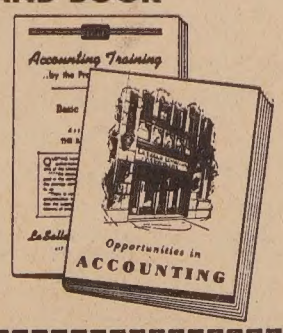
WILL RECOGNITION COME?

Do you feel that such things aren't for you? Well, don't be too sure. Very possibly they *can* be. You know that success *does* come to the man who is really *trained.* It's possible your employers will notice your improvement in a very few weeks or months. Indeed, many LaSalle-trained men have reported substantially increased earnings long before they finished their training. Others have quickly won higher position and larger incomes with the aid of this training.

GET FREE SAMPLE LESSON—ALSO "OPPORTUNITIES IN ACCOUNTING"

For your own good, get all the facts about this completely new and modern accounting training. Write for Free Sample Lesson—also latest book "Opportunities in Accounting," which will prove that accounting offers brilliant futures to those who aren't afraid of serious home-study, and will show the wide range of opportunities that exist today. No cost or obligation. If you want a position of higher income, greater prestige and professional standing...MAIL THE COUPON NOW.

FREE—
SAMPLE LESSON AND BOOK



LASALLE EXTENSION UNIVERSITY
A CORRESPONDENCE INSTITUTION

Dept. 159-H, 417 S. Dearborn St., Chicago 5, Ill.

I want to be an accountant. Send me, without obligation, Free Sample Lesson—also latest book "Opportunities in Accounting," and full information about your Accounting Training Program.

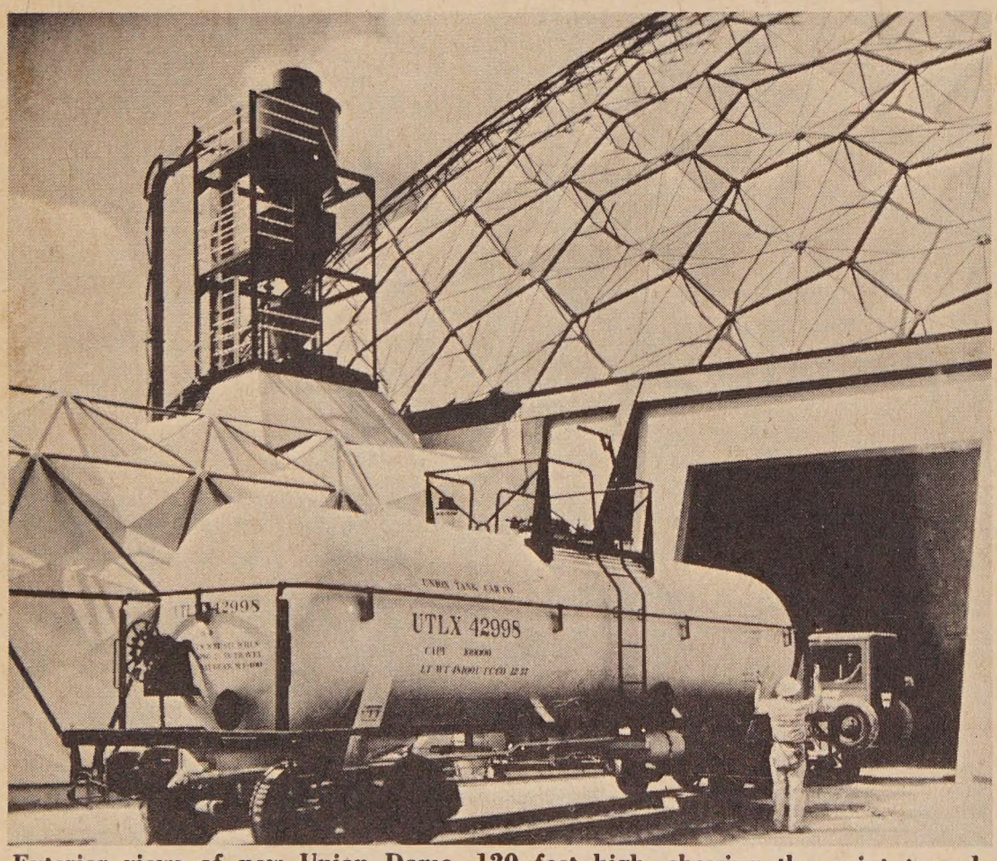
Name.....*Age*.....

Address.....

City, Zone and State.....

World's Greatest Dome Is Used for Repair of Tank Cars; Ultra-Modern Building Adapted from Old Roundhouse Design

by Freeman Hubbard



Exterior views of new Union Dome, 120 feet high, showing the paint tunnel.

THE GEODETIC DOME, a new concept in buildings and car shops, which Union Tank Car Co. developed at Baton Rouge, La., reminds you of a steam locomotive turntable. As the floor plan on page 8 shows, tracks radiate like the spokes of a wheel, while a trackmobile and a transfer table move tank cars in process of repair.

I have just returned from a visit to this gigantic hemisphere of goldenrod yellow reinforced on the outside with bright blue steel tubes. It made me think of a world's fair. It is the largest of all circular buildings without internal supports, It is also the world's biggest dome, the first geodetic dome fabricated entirely of steel, and the first all-welded dome. Total floor space, 110,000 square feet, is enough for a football field or a major league baseball diamond.

I saw a preview of the future, a revolutionary version of industrial design. UTC plans eventually to replace all of its important plants in the United States and Canada with similar struc-

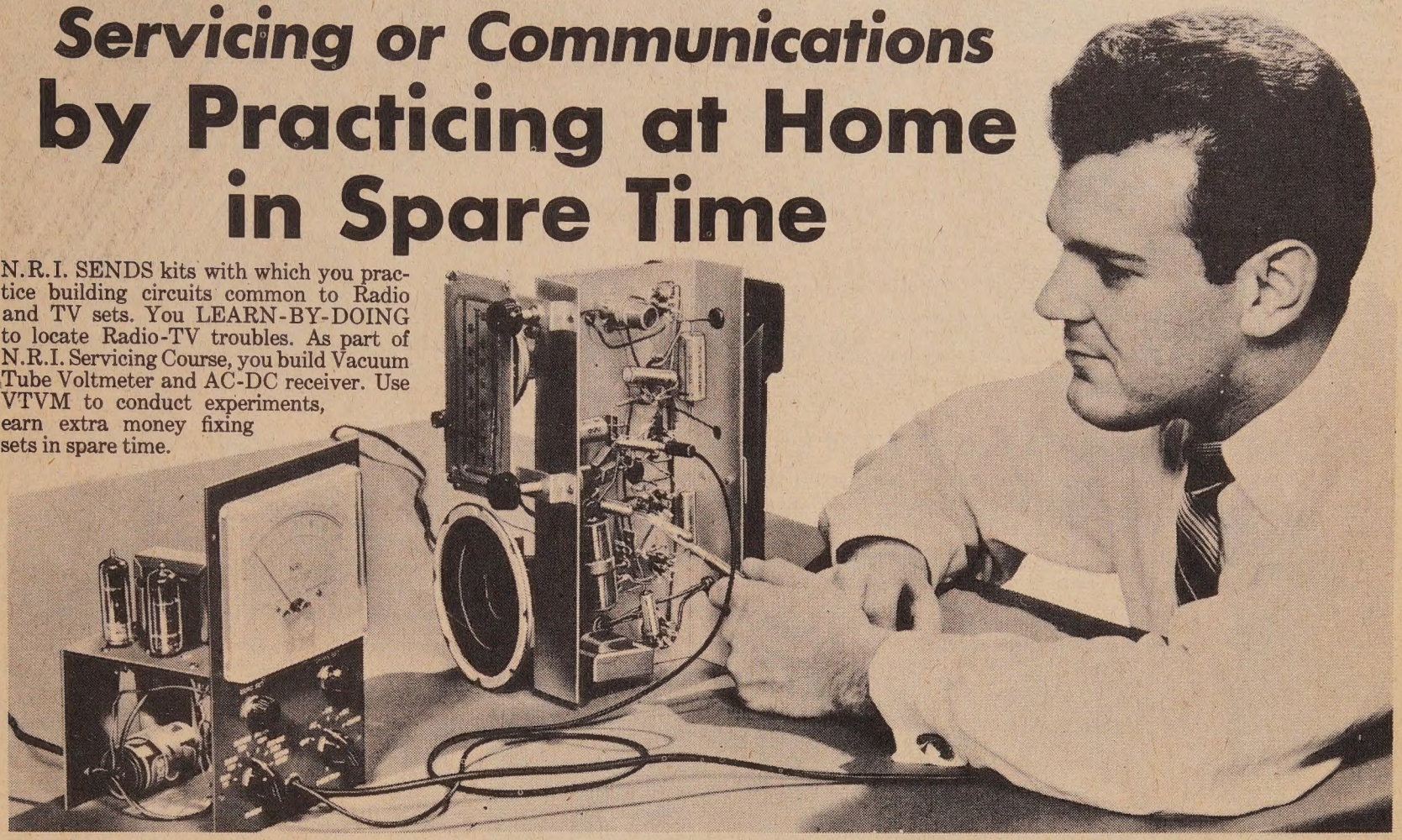
(Continued on page 8)

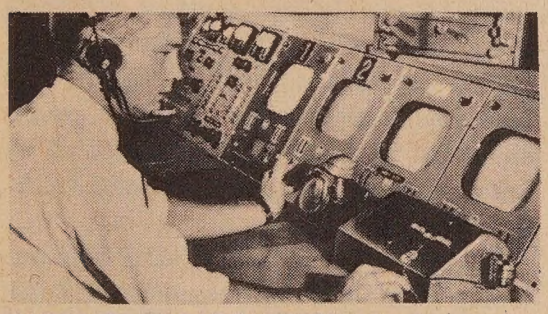
Learn Radio-Television

Servicing or Communications

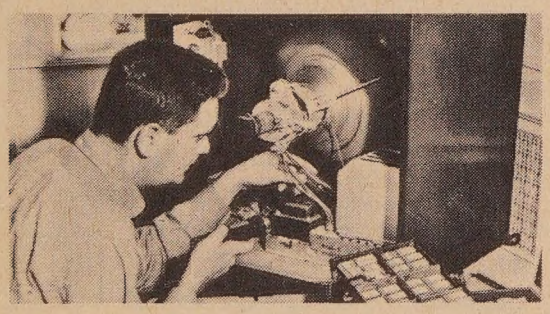
by Practicing at Home in Spare Time

N.R.I. SENDS kits with which you practice building circuits common to Radio and TV sets. You LEARN-BY-DOING to locate Radio-TV troubles. As part of N.R.I. Servicing Course, you build Vacuum Tube Voltmeter and AC-DC receiver. Use VTVM to conduct experiments, earn extra money fixing sets in spare time.





RADIO-TV BROADCASTING (see above) offers important positions as Operators and Technicians. RADIO-TV SERVICING Technicians (see below) needed in every community. Their services are respected, their skill appreciated.



Fast Growing Field Offers You Good Pay, Success, Bright Future

J. E. SMITH
Founder

Bigger than ever and still growing fast. That's why Radio-TV has special appeal to ambitious men not satisfied with their job and earnings. More than 4,000 Radio and TV stations. More than 150 million home and auto Radios, 40 million TV sets. Color TV promises added opportunities. For the trained man, there are good jobs, bright futures in Radio-TV Servicing or Broadcasting.

Training PLUS opportunity is the *ideal combination* for success. So plan *now* to get into Radio-TV. The technical man is looked up to. He does important work, gets good pay for it. Radio-Television offers that kind of work. NRI can supply training quickly, without expense of going away to school. Keep your job while training. You learn at home in your spare time. NRI is the OLDEST and LARGEST home study Radio-TV school. Its methods have proved successful for more than 40 years.

Added Income Soon - $10, $15 a Week in Spare Time

Soon after enrolling, many NRI students start to earn $10, $15 a week in spare time fixing sets. Some pay for their training and enjoy extra luxuries this way. Some make enough to start their own Radio-TV shops. NRI training is *practical*—gets quick results. Easy to understand, well illustrated lessons teach you basic principles. And you LEARN-BY-DOING by practicing with kits of equipment which "bring to life" things you study.

Find Out What NRI Offers

NRI has trained thousands for successful careers in Radio-TV. Study fast or slow—as you like. Diploma when you graduate. Mail coupon now. Paste it on a postcard or mail in envelope. ACTUAL LESSON FREE. Also 64 page catalog that shows opportunities, shows equipment you get. Cost of NRI courses low. Easy terms. **NATIONAL RADIO INSTITUTE, Dept. 9AR4, Washington, D. C.**

N.R.I. TRAINED THESE MEN FOR SUCCESS

"I was repairing Radios by 10th lesson. Now have good TV job." M. R. LINDEMUTH, Fort Wayne, Ind.

"Doing spare time repairs on Radio and TV. Soon servicing full time." CLYDE HIGGINS, Waltham, Mass.

"I had a successful Radio repair shop. Now I'm Engineer for WHPE." V.W.WORKMAN, High Point, N.C.

"There are a number of NRI graduates here. I can thank NRI for this job." JACK WAGNER, Lexington, N. C.

VETERANS Approved Under G.I. Bills

SEND FOR BOTH FREE

National Radio Institute
Dept. 9AR4 Washington 16, D. C.

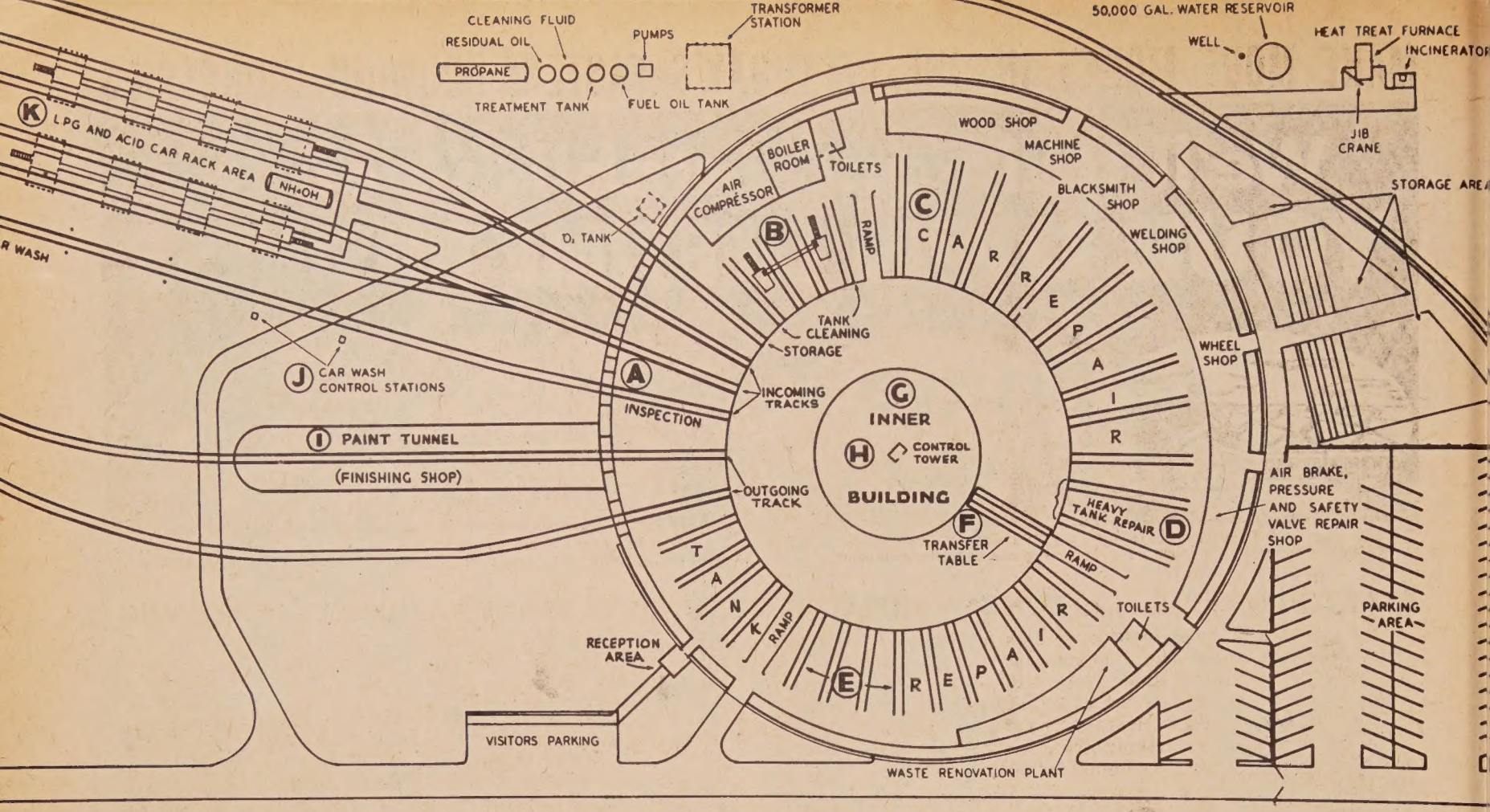
Mail me Sample Lesson and 64-Page Catalog FREE. (No salesman will call. Please write plainly.)

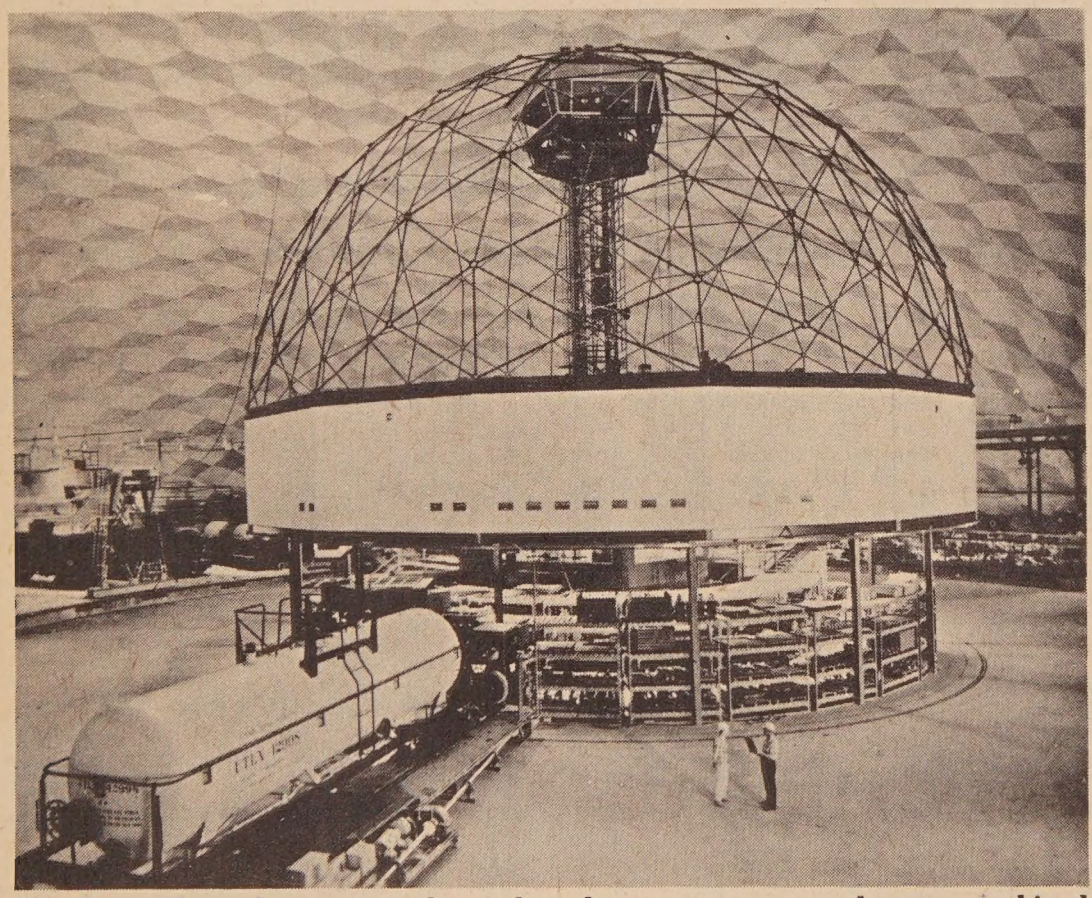
Name_____Age___

Address_____

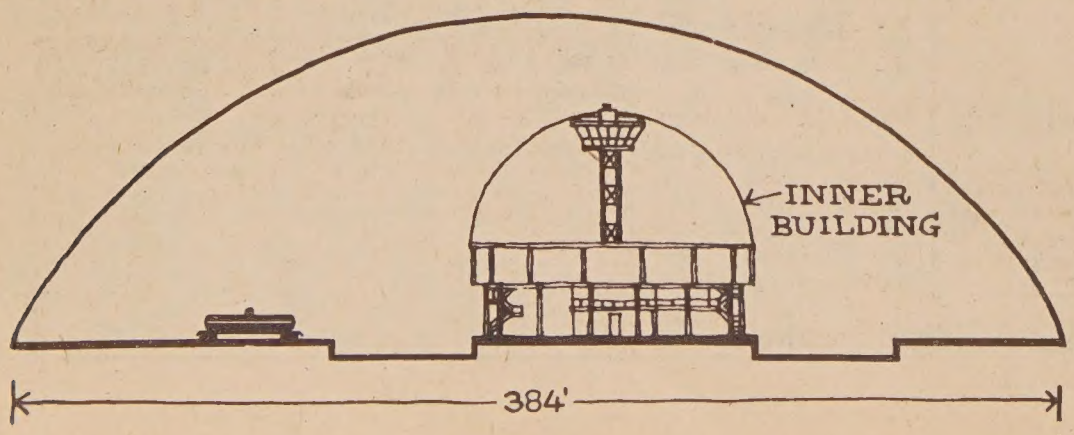
City_____Zone___State_____

Accredited Member National Home Study Council





The Union Dome has no outside window; but an aperture at the top, combined with open doors, assures good ventilation. The control tower, 80 feet above main floor, guides the operation of cars on the transfer table and repair tracks.



tures, next one on the list being located at Wood River, Illinois.

You may ask, "Why was the Union Dome at Baton Rouge built?" It was built not merely for publicity, although it currently has world-wide publicity value, but because such a structure is highly efficient for use as a car repair shop and because it can be erected at less cost than one of conventional architecture.

I was not surprised to learn that the Union Dome has more than doubled the efficiency of UTC employes working there, because the round pattern permits disabled cars to be taken easily to the men and equipment. In the old plant, which it replaces, repair jobs were delayed by the crisscrossing of tracks. Moreover, the new building eliminates outdoor work, placing all stages of tank car repair under one roof.

The above diagram shows: (A) point where cars entering Union Dome are inspected to determine repairs needed, (B) where inside of cars is cleaned, (C) general repairs location, (D) heavy repairs, (E) where repairs to tanks are made, (F) transfer table, (G) space for storage of materials, also offices and employes' rooms, (H) control tower, at top of inner building, overlooking all repair facilities, (I) paint tunnel or finishing shop, (J) car-wash control stations, (K) LPG racks for cars which hold liquified petroleum gas or acid. ●

MAKE MORE MONEY IN ONE OF TODAY'S FASTEST-GROWING INDUSTRIES

We'll train and establish you in YOUR OWN LIFETIME BUSINESS

U.S. Dept. of Commerce says—45 million homes in U.S. with . . .

$750 million yearly potential in rug and upholstery cleaning . . .

In your town, just 2 jobs a day earns $8,750 profit first year . . .

You become an independent business man with financial and social success.

START PART-TIME . . . IF NOW EMPLOYED

If you have longed for the prestige and financial independence of your own business, the time to turn this dream into reality is NOW . . . during this period of growth in the home furnishings cleaning service field. Here's your opportunity to get in on the ground floor of a booming industry.

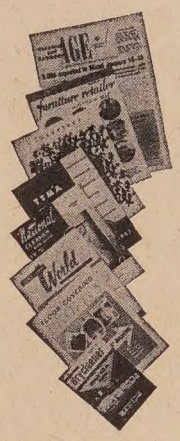
Spurred by population growth and new home construction, carpet and furniture manufacturers have more than doubled production within the past 8 years to meet consumer demand. This, in turn, has created a continuing need for the cleaning and care of these furnishings in homes, offices and institutions everywhere. Cleaning requiring specialized knowledge to protect and preserve costly investments—especially wall-to-wall carpeting and fine upholstered furniture—which you will learn under our guidance.

This is a sound, lifetime business which you can build from part-time to full-time, and then further expand by hiring servicemen. Alert Dealers can gross $9.00 hourly on own service, plus $6.00 on each serviceman at National Price Guide charges. We furnish everything required. No shop needed.

YOU'RE BACKED BY NATIONAL ADVERTISING

As a Duraclean Dealer you are backed by a National Advertising program which is larger than all other similar programs in the industry combined!

Consumer Advertising: Ads dramatizing unique benefits of your services reach a nationwide audience through influential magazines as House Beautiful, House & Gardens, Canadian Homes & Gardens, Town & Country, Parents', many others. To tie-in with this national campaign in your town, you receive ad reprints, ad mats, display cards plus other materials.



Trade Advertising: More and more retailers are becoming "agencies" for Duraclean Dealers. By recommending your services to their customers, they increase their profits and YOURS. Advertising targets retailers through key magazines. A proven agency program helps you convert retailers into agents. All these benefits you receive as a Duraclean Dealer.

We Help You Grow

YOUR personal success is of vital importance to every member of Headquarters' staff of experts (a few of whom are pictured here). Whenever a problem arises, whether it concerns business records, advertising, the cleaning of special fabrics, anything at all, you are given prompt, expert counsel. Our **Mutual Cooperation System** also provides 25 other unique continuous services: National Advertising in leading consumer and trade magazines as described above; copyright and trademark protection; local promotional material; home-show booth display; laboratory research and development; monthly sales-building magazine, regional meetings and national conventions, plus many others.

Five Ways To Make Money

Duraclean Dealership qualifies you to offer five services, thereby multiplying your profits.

1. **Duraclean:** Unique ABSORPTION process for cleaning and reviving rugs, carpets, upholstery. Recommended by leading stores and manufacturers. No scrubbing, soaking, shrinkage. Aerated foam manufactured by portable electric Foamovator safely removes dirt, grease, unsightly spots. Dries so fast customers use furnishings in few hours.

2. **Durashield:** *soil-retarding* treatment that KEEPS furnishings clean MONTHS longer. Applied after cleaning, this invisible film protects each fiber from dirt. Easy and quickly applied. So new you may be the *first in town* to offer this type service.

3. **Duraproof:** Protects against damage by moths, carpet beetles. Backed by an International 6-year Warranty!

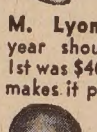
4. **Duraguard:** A flame-proofing treatment which reduces fire damage. Theaters, restaurants, hotels offer huge potential.

5. **Spotcraft:** Special chemical products which enable you to handle most all spot or staining problems.

What Dealers Say

W. Lookiebill (St. Louis): My 27th year! Began during depression and built business on good service.

D. Chilcott (N. Platte): Duraclean say gross $9.00 per hour. I gross up to $12.00. Many dealers do much better.



M. Lyons (Chgo): 2nd year should hit $100,000; 1st was $40,000. Hdqrs help makes it possible.

E. Roddey (Hampton, Va.): Did $600.00 first 12 days in January. My business keeps growing each month.

A. Wilson (Tulsa): Made $1,299 this month working alone. Duraclean outperforms all competitors.

Backed by Famous Awards

These two important honors conferred on Duraclean give PROOF of your superior services. As a Duraclean Dealer, you will be the only cleaning service in town backed by both these famous seals. No wonder customers buy Duraclean so quickly!

What Manufacturers Say

". . (Duraclean) standards in keeping with service to which . . carpets and consumer are entitled." —*Avisco* (*American Viscose Corp*)

". . superior to any on-location process with which I'm familiar." —*President, Modern Tufting Co.*

". . we approve this process . . in keeping with better service to Mrs. Housewife." —*Aldon Rug Mills*

FREE

Booklets Tell How!

Letter and illustrated booklets explain urgently needed services, waiting market, large profits, PROTECTED territory. Send coupon for free facts today.

Mail Coupon—You Get Free Booklets!

"OWN a Business" Coupon

DURACLEAN CO., 9-702 Duraclean Bldg., Deerfield, Ill.

WITHOUT OBLIGATION, show me how I may enjoy a steadily increasing life income in my OWN business. Enclose FREE booklets and free details.

Name .....

Address ..... County .....

City ..... State .....

DURACLEAN® CO., 9-702 Duraclean Bldg., Deerfield, Ill.

MAIL CAR

Readers and Fans Sit in With the Editorial Crew

Ward W. Wells, Anchorage, Alaska

Rita Martin of the Alaska Railroad put the 49th star in the American flag.

AN ALASKA RAILROAD clerk, Miss Rita Martin, had the thrill of a lifetime on Statehood Day when she climbed a fire-truck ladder to pin the 49th star to a large American flag that draped the Federal Building in Nome. Rita lives at 327 6th St., Anchorage, Alaska, and was visiting Nome as guest of the Anchorage Chamber of Commerce.

Born in 1935 at Bozeman, Mont., the daughter of a former Northern Pacific shopman, this adventurous girl worked for the NP in the summers of 1953 and '54 before moving north to take a job on the Alaska Railroad. She was crowned queen of the Anchorage Fur Rendezvous, an important social event, and since then has been receiving honors and invitations from far and wide. ●

OUR COVER PAINTING of the SP's slim-gage branch was created by Herb Mott, a railroad artist who has done many popular covers for us over the years. Herb titles it "The Gold Strike Route" because gold shipments figured conspicuously in the line's early years. ●

THE SON of a Missouri Pacific conductor killed in a wreck in 1904, George Robb, RFD 1, Sedalia, Mo., hired out to the MP in 1909. For 20 years he worked with the "cab gang" in the back shops, handling steam locomotive cabs. "Our shops had 1200 men," he recalls, "including my four brothers. We did such things as installing new steam gages, water columns, stokers, blowoff cocks, fire doors, and chime whistles. I worked on every class of engine on the road. At first they paid me only nine cents an hour for a ten-hour day, six days a week, but I loved steam locomotives even then and I still do. That's why I read *Railroad.*" ●

MASCOT of the Portland, Ore., Union Passenger Station was a large gray seagull named Yardmaster. For years he spent many daylight hours atop the high shed there, screaming his comments on the switching moves below and always ready to swoop down on any morsel thrown to him from the Southern Pacific train dispatcher's office on the third floor.

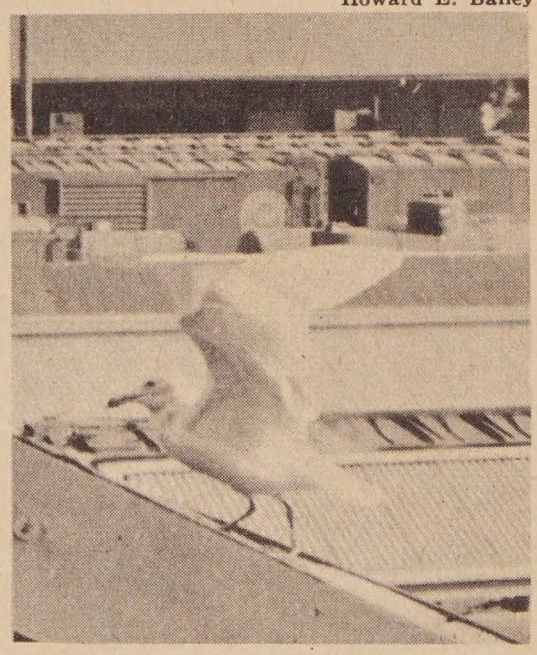
Now and then he'd light on the window ledge. Rarely did the men refuse to share lunch with him. One day the dispatcher's secretary unthinkingly left a package of meat sandwiches on the sill of an open window. Yardmaster suddenly swept the package to the deck below, broke it open, and ate the food.

The intrepid gull followed a regular migrating schedule. In 1946 the dispatchers began to log his arrival—on or about October 20th each year—and his departure—usually April 20th—in a chart hung on the wall.

But time changes all things. On Dec. 1, 1957, the Portland dispatcher's office was consolidated with a similar office at Eugene, Ore., 125 miles away. That morning the gull took his usual stance on the ledge, staring into the vacant room. For two days he perched there dismally, with no food in sight. At length Thelma Geer, a stenog in the special agent's office, opened a window and fed the bird part of her lunch. That did it! Thereafter Yardmaster visited her daily. But in late January, Thelma took a vacation, and when she came back he was gone.

"Where he went, nobody knows," comments Howard E. Bailey, an SP clerk. "Maybe he shifted his allegiance to another railroad. Maybe he lived out his life span and went to the eternal sanctuary where fish are plentiful and no gull ever goes hungry." ●

Seagull named Yardmaster, SP mascot.
Howard E. Bailey



A THOUSAND old diesel locomotives thus far have been turned in for rebuilding at the main plant of General Motors' Electro-Motive Division, LaGrange, Ill. The 1000th came from the Chicago & Eastern Illinois. This 2000-horsepower veteran of 12 years' service, 1,664,000 high-speed miles, was rebuilt into GM's latest passenger model, E9, with 2400 hp., and delivered ceremoniously. A gold-plated control lever was presented to C&EI's president, D. O. Matthews. Then a musical comedy star christened the "new" locomotive *Eliza Doolittle* (from a character in Bernard Shaw's play *Pygmalion*). ●

TEXAS has lost the distinction of being the biggest state in U.S. but it boasts having the newest railroad to be certified by the ICC, the Great Southwest Railroad, the first rail line built in Texas in half a century. The Great Southwest serves a vast industrial development that lies in the exact center of the Dallas-Fort Worth metropolitan area. It was scheduled for completion in December, 1958. The new line, 16½ miles long, connects with the Rock Island to the north and the Texas & Pacific to the south. ●

GEORGE MILBURN'S hobo story, "Dollar a Division" (Oct. '58 issue), is "damned good," comments Bill Knapke, retired SP conductor, Orinda, Calif. "Reminds me of the many times I collected 'bo money," he writes, "and of Dutch Schroeder, a brakeman on the Desert Division. Dutch had an accent. One day he demanded the usual dollar apiece from two Mexicans riding a boxcar. They tried to get by with one dollar for both, but Dutch held up two fingers,

(Continued on page 69)

Get into TELEVISION RADIO-ELECTRONICS

LEARN ALL 8 PHASES OF THE INDUSTRY BY SHOP METHOD HOME TRAINING

1. Television . . . including Color TV
2. Radio . . . AM, FM
3. Industrial Electronics
4. Communications
5. Sound Recording & Hi-Fidelity
6. Automation
7. FCC License Preparation
8. Radar & Micro Waves

Let National Schools of Los Angeles, a Practical Resident Technical School for over 50 years, train you at home by Shop-Method for unlimited opportunities in All phases of TV, Electronics, Radio.

You get 19 big kits of equipment!

GOOD JOBS . . . MORE MONEY SECURITY . . . ALL CAN BE YOURS

YOU are needed in the great modern Television-Electronics industry. Trained technicians are in growing demand, at excellent pay, in sales and service, manufacturing, broadcasting, telecasting, communications, research, and many other important branches of the field. National Schools Master Shop-Method Training, with newly added lessons and equipment prepares you in your spare time right in your own home for these fascinating opportunities. OUR OUTSTANDING METHOD IS PROVED BY THE SUCCESS OF GRADUATES ALL OVER THE WORLD!

YOUR TRAINING IS ALL INCLUSIVE

We prepare you for a long list of job opportunities. Thousands of TV and Radio receivers are being sold every day—more than ever before. And, now, Color TV is here. Applications of Electronics in industry —AUTOMATION—are growing in tremendous strides. The whole field is alive—opening up new, important jobs rapidly. National Schools complete training program qualifies you in all phases of the industry.

YOU EARN WHILE YOU LEARN

Many students pay for their entire training—and more—with spare time earning. We'll show you how you can, too! Early in your course you receive material that shows you how to earn extra money servicing TV and Radio receivers, appliances, etc., for friends and acquaintances.

YOU GET EVERYTHING YOU NEED

Clear, profusely illustrated lessons, shop-tested manuals, modern circuit diagrams, practical job projects—all the valuable equipment shown above—many other materials and services—consultation privilege with our qualified staff, and Graduate Employment Service. EVERYTHING YOU NEED for outstanding success in Electronics.

INDUSTRY NEEDS YOU. NATIONAL SCHOOLS WILL TRAIN YOU. SEND FOR FACTS TODAY NO OBLIGATION.

YOU LEARN BY SHOP METHOD . . . you do servicing, circuit analysis, and do over 100 down-to-earth experiments. You build a Superhet Receiver and a modern TV Receiver, from the ground up, including a new, big screen picture tube. You also receive a professional, factory-made MULTITESTER. All of this standard equipment is yours to keep . . . at just one low tuition.

RESIDENT TRAINING AT LOS ANGELES

If you wish to take your training in our Resident School at Los Angeles, the world's TV capital, start NOW in our big, modern Shops, Labs and Radio-TV Studios. Here you work with latest Electronic equipment — professionally installed — finest, most complete facilities offered by any school. Expert, friendly instructors. Personal attention. Graduate Employment Service. Help in finding home near school . . . and part time job while you learn. Check box in coupon for full information.

Approved for GI Training

NATIONAL SCHOOLS

LOS ANGELES 37, CALIF.

FREE! VALUABLE BOOK & SAMPLE LESSON —Just Send Coupon!

NATIONAL SCHOOLS

TECHNICAL TRADE TRAINING SINCE 1905
LOS ANGELES 37, CALIFORNIA

GET FAST SERVICE—MAIL NOW TO.

NATIONAL SCHOOLS, DEPT R3F-19
4000 S. FIGUEROA ST.
LOS ANGELES 37, CALIF.

Rush free TV-Radio "Opportunity" Book and sample lesson. No salesman will call.

NAME _____ AGE _____

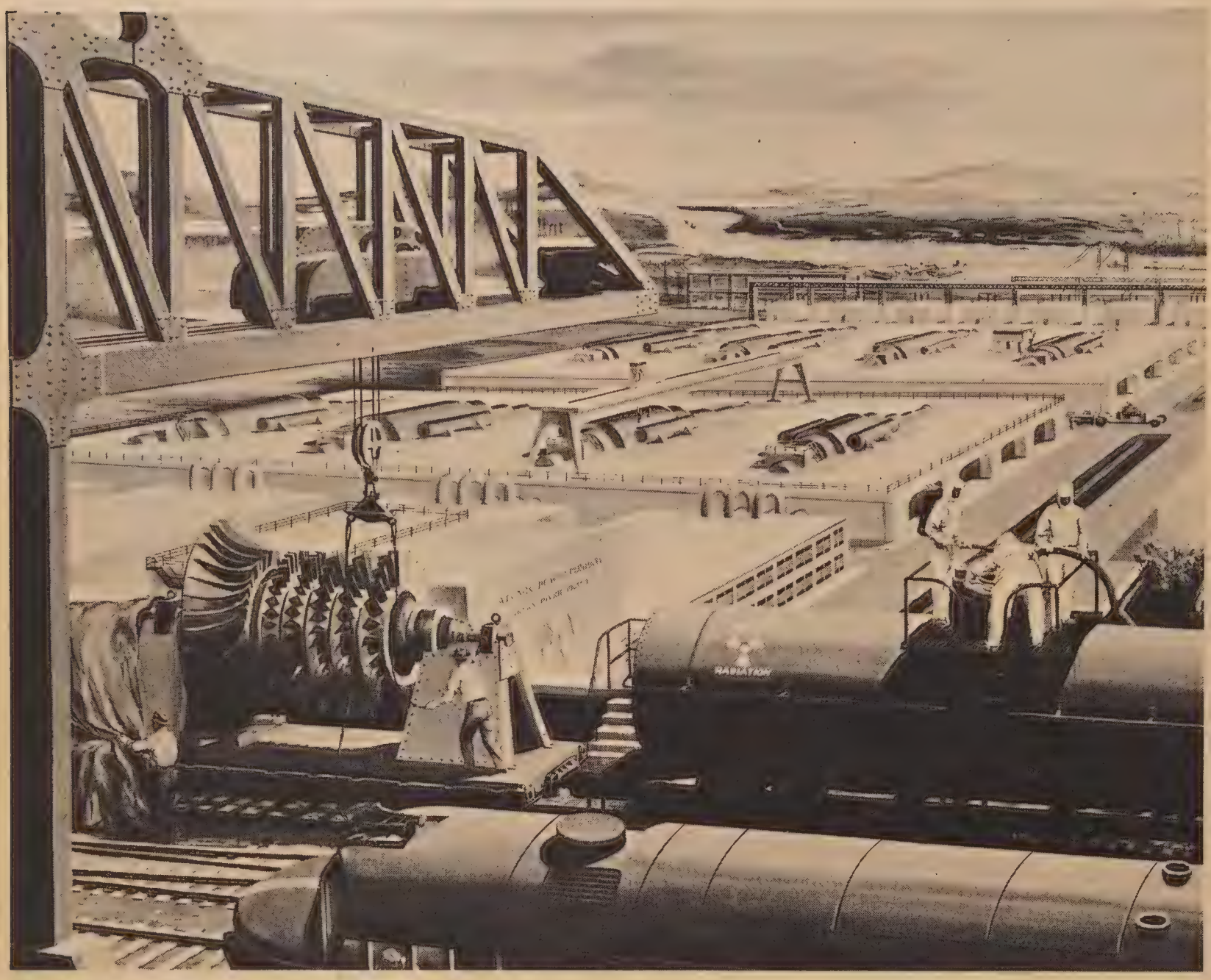
ADDRESS _____

CITY _____ ZONE _____ STATE _____

☐ Check if interested ONLY in Resident School training at Los Angeles.

VETERANS: Give date of Discharge _____

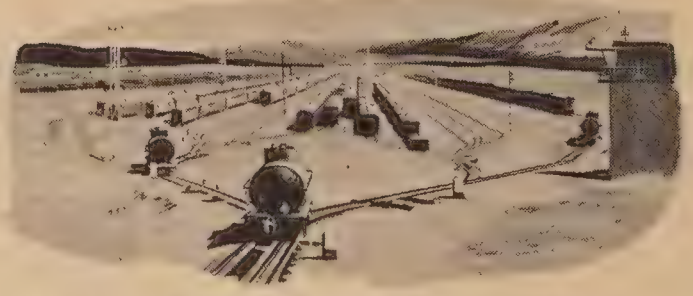
America's atoms-for-peace program moves ahead on rails of steel...



Another example of how railroad progress goes hand in hand with U.S. progress

From the very start of the nation's vital atoms-for-peace program, America's progressive railroads have played an essential role. The transportation job required in the construction of nuclear projects is vast and complex—and will become more so. And no other form of transportation can handle it with the efficiency and economy of the railroads.

Ever increasing efficiency enables the railroads to keep pace with the newest and most dramatic developments in our national life—a partnership in progress that is essential to every one of us, in peace as well as in war.



RAILROAD PROGRESS: *Electronic freight yards improve service, speed shipments, keep America's freight on the move.*

AMERICA MOVES AHEAD WITH THE RAILROADS

Association of American Railroads, Washington, D. C.

ESSENTIAL TO THE NATION'S ECONOMY

Photos of the Month

Don Wood, 29 Mt. Haven Drive, Livingston, N. J.

Dramatic night shot of the Nickel Plate's yards at Bellevue, Ohio, in the great triumphant era of steam power.

This, too, is railroading. A tugboat captain works two float-loads of boxcars and gondolas from New Jersey into their berths at the New Haven's freight yards in uptown New York City.

Steam still rules New Zealand Railways. While fireman fills tank of Ja 1296 at Ashburton, driver pushes coal over to the shoveling plate.
New Zealand Government Railways

Two northbound Chesapeake & Ohio freight trains are shown at the same spot, Prestonburg, Kentucky, but at different times and on adjoining tracks. Which photograph do you prefer?

Chesapeake & Ohio Railway

An Electro-Motive Field Man Tells About Shakedown Trips and How He Instructed Oldtime Steam Hoggers in Acquiring New Skill

by JOHN F. McELHINNEY

HOW DID oldtime hoggers, born and bred in the best traditions of steam, react to the diesel-electric "invasion"? Did they welcome the new power for its efficiency in operation and maintenance, its economy, and the "white collar" working conditions in its cab? Did they realize that here, at last, was a way to check the downward slide of railroads in the competition with other forms of transportation?

Or did they cling to past glory, dreaming of triumphant Mikados and Mallets, steam whistles, billowing squirrel-plumes of coal-smoke, and the fireboxes that lit up the sky at night with a scarlet glow, and for that reason did they resent Mr. Diesel's invention?

I learned some of the answers to these questions by working for the Electro-Motive Division of General Motors. My job was to deliver diesels to various railroads and show the enginemen how to handle them, and I started with a shakedown trip on the Frisco Lines out of Fort Smith, Arkansas.

It was November 17, 1950, an hour after midnight. I checked the new diesel, Frisco No. 534, a GP-7 road switcher—*GP* meaning, of course, general purpose. This unit was assigned to freight run X-732, with nineteen loads and six empties, from Fort Smith to Monett, Missouri, 134 miles through the Ozarks. It was as good a way as any to shake down a new locomotive and qualify the crew.

While the 534 waited on a siding for her crew, my mind raced back over the years to my boyhood home in Iowa. How well I remembered watching and listening with a certain ecstasy as steam engines puffed up to the depot with freight or passengers or batted cars noisily around the yards! In those days I thought the Steam Age would never end and I yearned to become an engineer when I grew up.

That wasn't so very long ago. But now the Steam Age had gone and I was starting out as a field instructor for Electro-Motive, delivering diesel locomotives. What's more, I would show a veteran steam hoghead how to operate one.

My eyes followed the Frisco crew men threading their way across the dimly lit maze of tracks in the Fort Smith yards, toting lunch pails in their hands. The 534's tall and slim gray-haired engineer stood out in contrast to his stocky young fireman, representing the old and the new, steam and diesel. The dispatcher had briefed me. He said that the old fellow had been railroading with steam power more years than I had been alive.

I wondered how such a man would take to the diesel.

As it turned out, his interest in learning the fine points of diesel operation was obvious from the moment we met. "I'm ready," he offered. "I hear it isn't too hard to get the hang of."

"No," I said, "it isn't."

His willingness to acquire a new skill was typical of the crews I worked with. Sure, the men liked steamers. But they knew the world was changing and they weren't going to be left behind.

BACK in the Thirties, when diesels first came into general use, crews who had long been accustomed to steam power resisted them argumentatively. It is characteristic of grayheads in general to look unkindly at new ways of doing things. And it's only natural for oldtimers to regret the passing of steam. Many young

I DELIVER DIESELS

Chesapeake & Ohio Railway

railfans feel the same way. They know that steam helped to open up the West and make the United States and Canada the great nations they are today.

But the crews soon found out that diesels could be used to combat the rival forms of transportation. They discussed the subject with one another. They dug up facts and figures. They discovered, for example, that with dieselization a road might increase its freight-car usage by about one-third, because diesels haul more tons faster. And so, by 1950, when I began delivering diesels, the enginemen's prejudice against them was pretty well dissipated and I personally did not come across a single crew that hesitated to learn how to run diesels.

Before a field man starts to instruct a crew, an Electro-Motive delivery program has completed the first two of its four phases. As for No. 534, she had already been shipped from the E-M plant at LaGrange, Illinois,

to the Frisco's fine diesel shops at Springfield, Missouri, as part of a freight train, and the railroad had officially accepted her and put her into service.

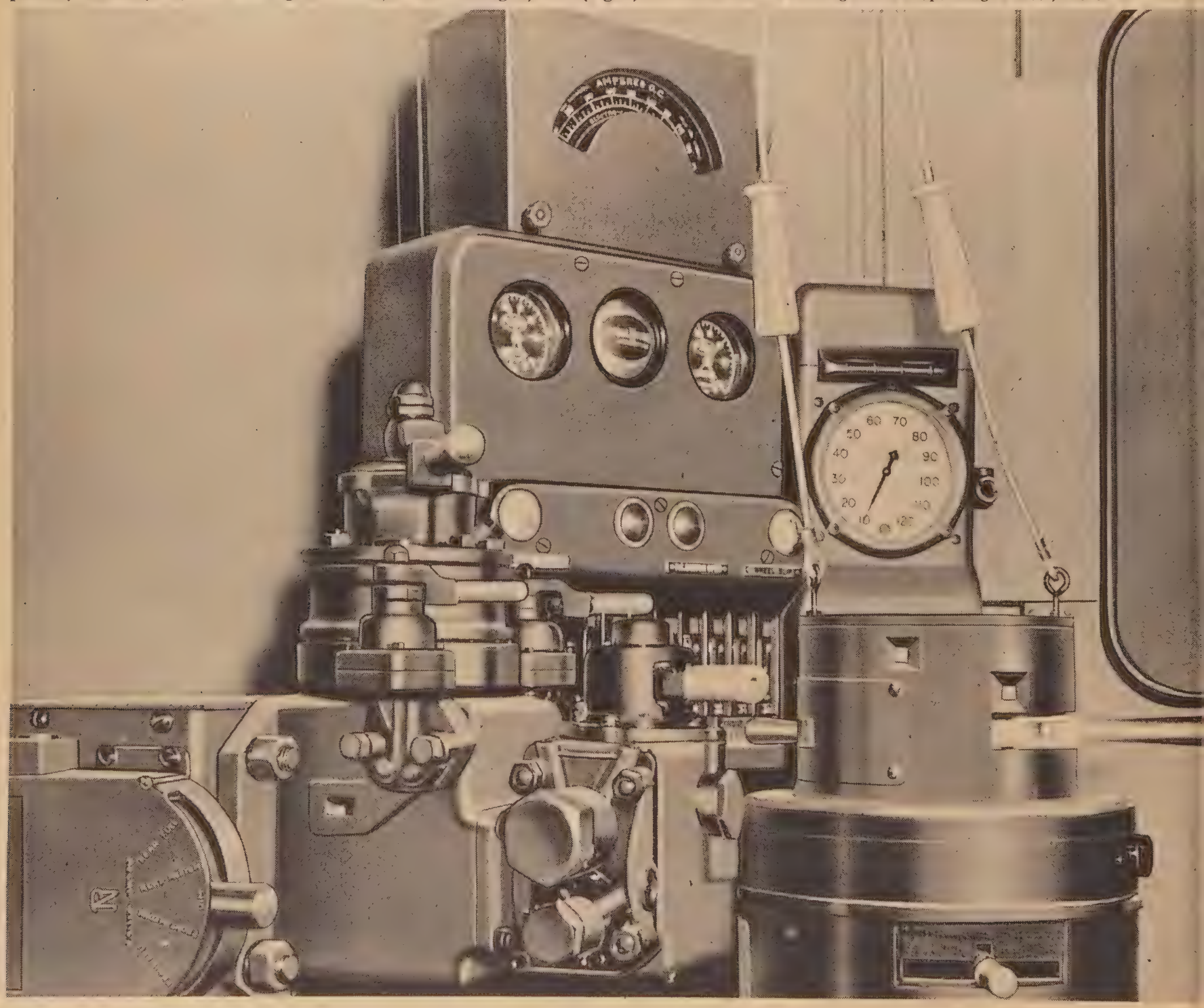
In the Frisco shops, a field instructor and railroad shopmen checked every nut and bolt, so to speak, to make sure the GP-7 was built to contract specifications. Nearly 80 percent of the unit was the basic Electro-Motive design for a GP-7. This standardization permits mass-production building methods that result in lower prices and lower maintenance costs. The rest of the GP-7 had been built to the customer's designs—special lights, controls for traffic systems such as ATC or CTC, and so on.

Since each order—or even each single unit—usually differs slightly from all others, due to technical progress or intended use, railroad officials are very meticulous during an "acceptance." For example, at Minneapolis in May, 1951, even after checking a new F-7 with a Northern Pacific shop foreman, I spent most of an afternoon being quizzed by the NP's mechanical superintendent. I didn't blame him for the grilling. He had to sign acceptance papers that added up to more than 20 million dollars worth of new F-7's.

After a new diesel has been accepted, she is put into service. This second phase of a delivery program is somewhat like the process of getting your new car ready to drive. The new unit is fueled, greased, and oiled. The diesel engine is started and "run in" for a few hours. Instruments, controls, and brakes are checked. At this point new diesels also are fitted with equipment usually peculiar to the railroad which bought them—such as boxes or holders for flares, flags, lanterns, and maybe a box for certain tools.

With the unit put on the roster, she is ready for road service. And, as that Frisco engineer had heard, operating a diesel is rather simple.

Engineman's controls in EMD diesel locomotive cab, model GP-7. (Top panel) Load indicator. (Middle panel) Air gages. (Lower panel) Alarm lights. "Clock" is speed recorder. The white handles above it are horn pull-cords. Large lever at the extreme right is the throttle lever. On a line with it, to the left, you see the transition lever (if used). Above the transition lever, further left, the independent brake valve juts out. Above and to the left of the i.b.v. (just below the alarm lights) is the bell-ringer valve, to the left of which you see the sander valve. Topmost valve is the automatic brake valve. At the botom of the photo you see (left) the headlight control, dim and bright, and (right) reverse lever. EMD Enginemen's Operating Manual, Model GP-7



BEFORE showing the operating cab to a crew, I walked around the unit with them. They inspected fuel and water tanks, traction motors, and air reservoirs. We opened air-line drain cocks to blow out any water in the lines. We backed off a few steps and listened to the diesel engine idle smoothly, then walked up steps or climbed the ladder leading to the cab.

Inside the cab, crews often were surprised to find many comforts of a new home—cushioned, adjustable armchairs, electric water coolers, toilet facilities, thermostatically-controlled cab heaters, electric outlets for coffee pot or hotplate or even an electric shaver, lockers for grips and clothes, and defrosters to keep cab windows clear of frost and ice. Then, seated in a cozy chair, the engineer recognizes an old friend, the same type of air-brake he had used on steam locomotives.

Diesel 6BL and 6SL brakes are almost identical to the 6ET, so stopping a GP-7 was mostly a matter of familiarizing yourself with the way the diesel's weight reacted to the brakes.

Putting a diesel locomotive into motion is almost as easy to learn as driving your own car. Just set the reverse lever to control the direction of the locomotive, then release the brakes, and "notch out" the throttle lever that controls the speed. Again, it is mostly a matter of getting used to a train's reaction to the controls because a diesel-electric "shifts gears" automatically.

At low speeds, when pulling power counts most, the low-voltage control circuitry connects the four high-voltage traction motors in series or series parallel. By the time the train is at "cruising speed" the traction motors have been connected in parallel. But the crews can hear the various transitions take place. A good engineer soon learns to listen for the transitions, and when he hears a wrong sound he knows the unit may have developed trouble of one kind or another.

Trouble-shooting is the last phase of an Electro-Motive delivery program. Sometimes, though, I ran into trouble that had nothing to do with the new diesel—like the wheel slip down in Texas on the St. Louis, Brownsville & Mexico line. That dry, hot, mid-May day the crew was qualified and the unit, No. 4162, was wheeling a local freight from San Antonio to Corpus Christi, a light 33 cars weighing only 1,200 tons. This should have been an easy load for the GP-7, yet the wheel slip light kept popping on and off and it became worse as we proceeded.

Electrical connections and relay settings were checked and rechecked. Everything was fine. Still the white light flickered on and off. The fireman and I even went out onto the catwalk and leaned over the guard rail to watch the wheels actually slip.

At length we spotted the difficulty. Sitting on a siding up ahead, waiting for our train to pass, was a maintenance-of-way gang with a weed-sprayer. Their spray had been covering the rails as well as the roadbed and, on rails, it acted like grease.

ON OTHER occasions, new diesels developed trouble in places most embarrassing for a field instructor. A few minutes after four p.m. in the station at Pittsburgh I watched a crew couple the Pennsy's new E-8 passenger units 5808 and 5809 to train No. 10, a thirteen-car mail and express consist headed for New York City. Came 4:30 and the engineer notched out on the throttle lever. *Wham!* Instead of power, he got a "big hole" brake application. It took us thirty minutes to locate and fix the trouble.

Pennsy officials were slightly (and justifiably) annoyed at this delay during the rush hour. But I still don't see why they had picked that time and train for a shakedown trip with new units. All the factory tests on earth can not measure up to actually pulling a train, day in and day out, and yet some railroad officials prefer to assign new units to good trains right off the bat.

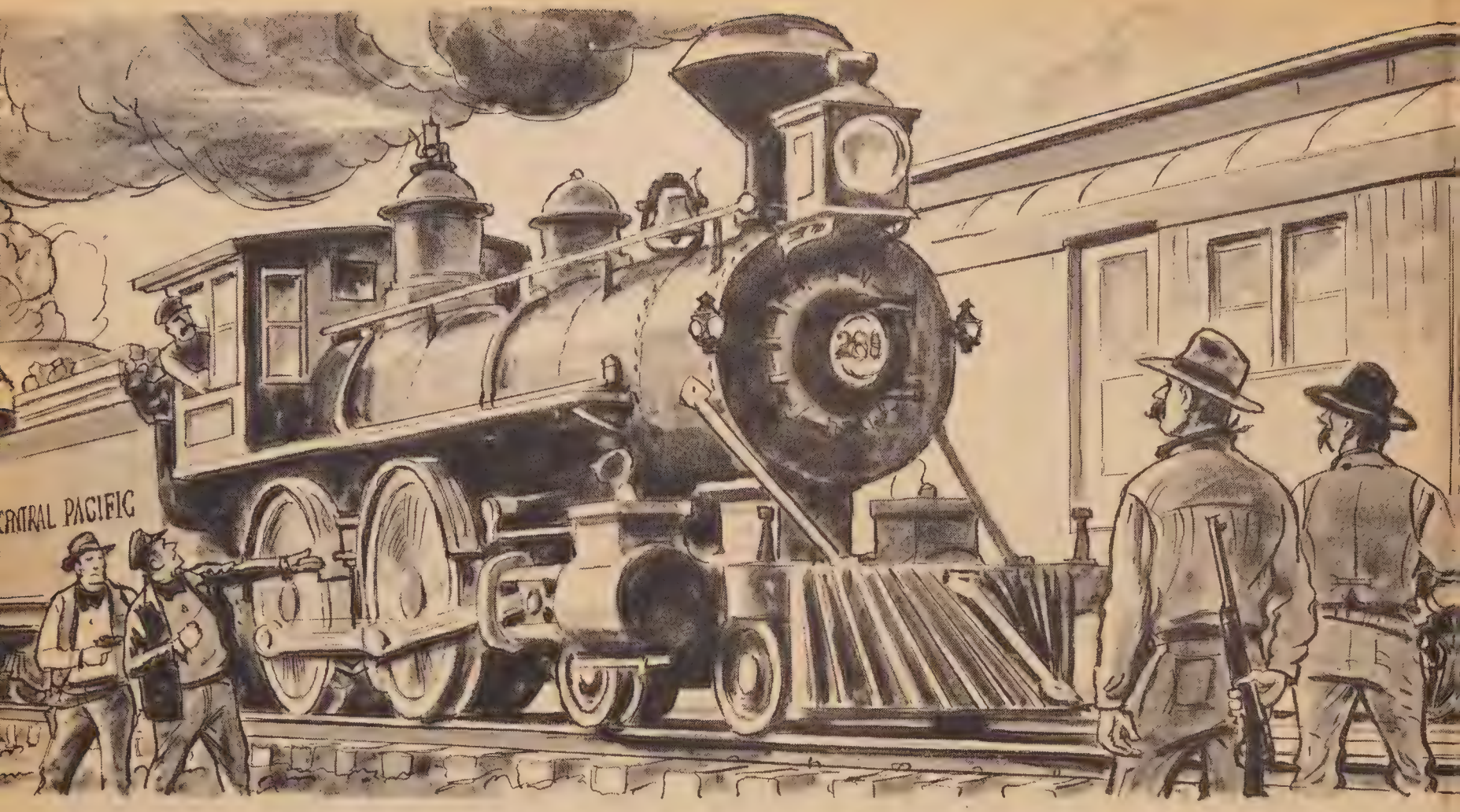
Ten months later, in October, 1951, I spent two weeks riding between Decatur and Chicago or St. Louis, literally sweating out the performance of another E-8, Wabash No. 1000, assigned to the well-known *Bluebird.*

The vast majority of my shakedown trips were routine and locomotive performance was normal. The new units had been designed for day-to-day use after being put into service. But, to make certain, they were put through 72 hours of shakedown service, then brought back to the diesel shops for a general "tightening down." Again, a field instructor and a shop crew checked the new unit from coupler to coupler. All nuts and bolts were tightened, all mechanical and electrical systems rechecked.

After such a 72-hour inspection, a field instructor is assigned to another delivery program and his job begins all over again.

Field instructors have varied backgrounds. One man whom I know had started working for Electro-Motive on an assembly line. Others had been top mechanics, some employed by railroads. Still others had been school teachers or just plain adventure-loving young fellows with a bent for things mechanical, who wanted the nomadic travel offered a field instructor. All of us like railroading and railroad people and the chance to see different parts of the United States and Canada, maybe even to make a foreign delivery.

In 1950 I was only a year out of Iowa State's Engineering School and was eager to get some field experience. I sure got it by delivering new diesels to railroad companies and showing competent old steam hoggers how to run them. ●



Westbound Number 2 arrived and took siding at Montello, but the hogger of stalled Number 1, prodded by a gun, waved it by.

HOLDUPS THAT MISFIRED

Many Criminals Have Been Thwarted by Railroad Men With Ingenuity and Raw Courage — In One Case Lady Luck Intervened Eighteen Years After the Robbery!

by Jack Maguire

A NOVEL FORM of crime that would have cost the Erie Railroad considerable money was thwarted one night in October, 1882, by the suspicious nature of Peter F. Donohue, a young paymaster's clerk employed in the Jersey City Terminal.

Pete was dead tired that night. He had just finished counting $40,000 in greenbacks that would mean payday tomorrow for the Erie shopmen who worked at Jersey City. As he tallied each pile of bills he fastened it with a rubber band. At last, with a sigh of relief, he put them all into the office safe, slammed the massive door, and locked it. Then he strolled down the hall, first to the men's room and then to the office of A. B. Haring, the gray-haired night operator, for a cup of coffee.

The pot of Java that bubbled on a cast-iron stove in Haring's room sent its tempting aroma out into the corridor. As Pete opened the door, the telegrapher began to pour steaming hot coffee into two battered tin cups that stood on the telegraph table. At that moment the sounder went into action. Mr. Haring set down his pot and scribbled the following message on a pad:

> 8:17 p.m. Cut out your office from Number 1 and leave it cut until ordered to cut it again. WJH.

The initials were those of W. J. Holmes, the Erie's superintendent of telegraph. Mr. Haring read it aloud, trying to decipher whether the Old Man was playing a joke on him or had suddenly taken to drink. Then

the sounder called him again, with a message to E. O. Hill, division superintendent, which said:

> Plot to rob playmaster's safe discovered. Arrangements made to transfer money to New York for safekeeping. Inspector Byrnes of New York police is sending Detective Doylan with horse and wagon to Jersey City. Turn money over to him. I have Inspector Byrnes' receipt.

It was signed "BWS," the initials of General Bird W. Spencer, the railroad's treasurer. Both telegrams had been sent from Passaic, N. J., by a brass-pounder whose touch was erratic, to say the least.

"It sounded like stuttering," Mr. Haring explained to Pete.

The two men were still digesting those messages when the sounder chattered again in the same jerky fashion. This time it directed Paymaster Charles N. White to ride a locomotive to Passaic at once for a conference with General Spencer. Draining his coffee, Pete set out to find his boss and give him the mysterious order.

Silence brooded over the office. The night op pulled down his green eyeshade and settled back in his chair to figure out what could be going on. That message to the Grand Llama, as the paymaster was called, puzzled him. If General Spencer was sending a detective to pick up the payroll, why did he want to see Mr. White in Passaic?

IT SO HAPPENED that the treasurer was not in Passaic at that moment but was actually walking into the Erie Railroad office at Paterson, N. J. The Paterson night operator was a new man, so Spencer introduced himself and said he'd been attending a meeting of the Paterson Light Guards that night and was looking for a train to get home to Passaic.

"But you can't be General Spencer," said the startled op. "General Spencer has been in Passaic all evening!"

"The hell you say!" Spencer retorted, and established his identity in loud, sharp tones. The apologetic brass-pounder then briefed him on what had happened, and the General asked for an engine for a quick trip to Jersey City.

Meanwhile, Paymaster White had burned up the ballast in geting to Passaic and then back to Jersey City. He stormed into Mr. Haring's office and asked what the devil was going on. Without comment, the night operator handed him the flimsies of the two messages that had come in. Mr. White had him send the following:

> B. W. Spencer: I will deliver the money to nobody but you in person. CNW.

The reply snapped back:

> Do as you're directed. BWS.

Seconds later, the sounder in Haring's office jerked out this question:

> Is Pete there? BWS.

By this time the paymaster's clerk had returned and he read the message. "General Spencer didn't dictate this," the clerk said quickly. "He's a stickler for formality and always calls me Peter."

"Now it makes sense," said Mr. Haring. "Of course Spencer didn't send the message. The guy who did is an op named W. J. Sipple. I recognize his fist."

He called Sipple on the wire, but there was no answer. Mr. Haring then told Pete to notify the police.

Hours later, the operator with a jerky "fist" was arrested while trying to grab a westbound rattler in the yards. He admitted he had sent the fake messages in order to clear the way for a payroll hoist.

Sipple had tapped out the messages from a Jersey City office with a telegraph key that ordinarily was never used at night and previously had hidden a horse and wagon nearby. He had felt sure that Pete would follow the telegraphed instructions and hand over the money to "Detective Boylan." Sipple had never met the young clerk and knew that the latter wouldn't recognize him, especially since he'd be carrying fake credentials.

The plan might have succeeded if Pete hadn't branded as a fake the mention of his name. Once it became known that the company treasurer was not dictating the messages, the rest proved easy for an old lightning

slinger such as Erie's A. B. Haring.

"Morse is like a spoken language," he told the police. "Every operator has his individual way of tapping the key. Only two men that I know have a peculiar halting touch. One of them is now in Canada. The other is Sipple."

MORE than one plot to rob a railroad has been foiled by ingenuity, and some have been stymied by the raw courage of a railroader facing the muzzle of a gun. Take the case of Colonel Samuel W. Fordyce, president of the Cotton Belt from 1886 to 1890.

Col. Samuel W. Fordyce, who recognized a man holding up Cotton Belt train.

Fordyce was a gallant gentleman with silver-gray hair and a long beard. One day he was traveling over the line in his business car with the board of directors when a red light flagged down their special north of Texarkanna at the Red River bridge. A crusty operating man of the old school who liked to know the whys and wherefores of any unusual incident connected with the movement of trains, the Colonel beat the conductor to the cinders when the train jolted to a stop. A masked man poked a Colt in his ribs and invited him to back slowly into his private car. Fordyce retreated and the bandit followed him inside.

A dramatic scene ensued in the soft light of the observation lounge. The gunman startled as he recognized his victim. Simultaneously the brass collar identified the man's voice as that of Shang Doland. He had good reason to remember Doland. The fellow had worked as a freight conductor on an Ohio road, many years before, while Fordyce was a station agent on the same line. Not only that, but Fordyce had befriended Doland later on by getting him a job on the local police force in Hot Springs, Ark., and still later, after the ex-brakeman had gone to prison for killing a man, Fordyce had helped to get him a pardon.

Now the Colonel faced him coldly. "Put that damn gun away, Shang!" he ordered. "Aren't you ashamed to rob a road as poor as this one? Nobody with money rides the Cotton Belt. Why don't you go over and hold up the Iron Mountain?"

The astonished outlaw pulled off his mask and held out his hand. "Excuse me, Colonel. If I had known this was your special, I'd never have held it up. I'll go out and stop the boys and let you go. Goodbye!"

Years afterward, Colonel Fordyce would chuckle to recall that Doland had never again bothered the Cotton Belt but had actually followed his tip about the Iron Mountain Railroad (now Missouri Pacific) Shortly after the abortive Cotton Belt holdup, Doland's gang robbed an Iron Mountain passenger train a few miles out of Texarkanna.

"The damn fool took me seriously," Fordyce would say with a toss of his head.

HALFWAY across the country another railroader, who was as taciturn as Fordyce was vocal, staved off a bandit gang for more than three hours in the Nevada desert rather than surrender $600 which had been entrusted to his care.

Aaron Ross was a towering figure, six and a third feet tall, a native of Maine who weighed some 250 pounds. This giant had gone West to work for Wells Fargo as an express messenger. One biting cold January morning in 1882 he rode alone in the express car as Central Pacific train Number 1 rolled steadily across the sand and cactus stretches of Nevada toward the Utah line.

Ross had completed his day's work and hoped to enjoy shut-eye in his bunk before they arrived at Toano, the division point, but was awakened by an unscheduled stop at Montello. That tiny way station was graced only by a frame bunkhouse which served as home for a gang of Chinese gandy dancers. Before he could open the car door, a rifle barrel poked through a hole in it and a voice commanded him to open up.

Ross peered out cautiously, keeping at a safe distance from the rifle.

Five masked riders on horseback had halted the train with robbery as their motive. But the big fellow from Down East was not easily intimidated. In a Yankee twang he told the visitors to go to hell and he fired a shot from his Winchester. The besiegers answered with a volley of their own that soon developed into a pitched battle.

For three tense hours the express car faced attack. Desperados riddled its wooden sides with rifle and revolver bullets. One slug smashed the overhead kerosene lamp. Others peppered the elbow-shaped pipe of the pot-bellied stove, sending acrid black smoke pouring into the car. Ross coughed and kept up his own barrage. In the course of the melee half a dozen bullets struck him but without causing critical wounds.

At length the bandits changed their strategy. "We'll bust your damn car wide open," their leader yelled. "You here," he said to the engineer, "uncouple that mail car and pull it down the track a little ways!"

"What for?" asked the hogger.

"Never mind what for." The leader aimed his gun. "Now get goin' afore I drill yuh between the eyes."

He forced the engineer to catapult the mail car against the express car once, twice, three times. This maneuver failed to damage either car seriously or impair the morale of Aaron Hess. Only when the eight-wheeled woodburner's fuel gave out did the battering stop.

Next they tried to burn him out, but the locomotive wood-rack was bare, while the bleak Nevada desert did not yield even a piece of mesquite to serve as fuel. The frustrated outlaws held a council of war.

At that juncture westbound Number 2 reached Montello and took siding, but, with some prodding from a gun, the engineer of the delayed train waved it by with a formal greeting. Number 2 proceeded down the main line. Ross was still inside the express car. With only a few

Then, unexpectedly, the besiegers stopped firing. The undaunted messenger, wiping away the blood from a superficial scalp wound, peered through a bullet hole in the car wall to see what had happened. The bandits were fleeting through the sagebrush with a mounted posse in pursuit. Number 2's conductor, with a railroad man's inborn ability to sense danger, had surmised that the crew of Number 1 was in trouble and had given the alarm to officers of the law.

When the delayed train finally reached Ogden, Aaron Ross had his wounds treated and he permitted the station agent to send the following terse message to Wells Fargo's San Francisco office:

> Ross's hand badly torn by bullet and groin discolored by spent ball. Feels jubilant and probably will want day off one trip.

Ross' heroism earned him not only a trip off with pay but also the lasting gratitude of Wells Fargo and a nickname, "Hold the Fort," which was to follow him to the grave. Although he had risked his life to defend only the $600 in his express car, his action saved Uncle Sam even more. By keeping the outlaws diverted, Ross gave them no chance to find out that the mail car they used as a battering ram carried almost a half-million dollars in unminted silver!

ANOTHER express messenger, David A. Trousdale, made national headlines in 1912 when he single-handedly sent to Boot Hill a pair of gunmen who were robbing a Southern Pacific train at Dryden, Texas. The details of this case were told in an article by Freeman Hubbard entitled "Sunset Express" in the August '58 issue of *Railroad Magazine*.

Pure luck also has helped railroaders to checkmate robbers. We come now to one of the most unusual crimes in transportation history. It began on September 8, 1889, when rounds of ammunition left, he was wondering how long Wells Fargo could hold out.

the head of the Wells Fargo office in Kansas City was startled to receive this telegram:

> I have stolen your gold shipment of $50,000. I await your arresting officers. John Dale Hammond, Caddo, Indian Territory.

Hammond was the Wells Fargo agent at Caddo and the gold entrusted to his care had disappeared mysteriously. Officers of the law wasted no time in going to Caddo and picking him up.

From behind the bars of his cell, Hammond admitted his guilt and he pointed out shrewdly that, under existing laws, his stiffest sentence for theft could not be more than twenty years. Now, Hammond's annual salary as agent for the express company had been only $600. He figured that with the maximum term he'd make an average of $2,500 a year as long as he stayed in prison, because he'd refused to say where the money was hidden. Under this plan, after he had served his term and couldn't be re-arrested on the same charge, he could look forward to spending the rest of his life in luxury.

The renegade pleaded guilty and was given the maximum sentence. Walls Fargo continued in vain to search for the gold.

Eighteen years after Hammond had gone to prison the Missouri-Kansas-Texas was double-tracked from Muskogee, Okla., to Denison, Texas. The new line passed through Caddo, paralleling the old track at a distance of less than fifty feet. To reduce the grade, engineers decided to gouge out a deep cut through Caddo, and a Katy maintenance-of-way gang went to work. One of these men was a steam-shovel operator whose name is not recorded.

On a bright summer morning in 1907, working behind the old station, this man unearthed the long-missing Wells Fargo safe. Years of burial had not impaired its combination. A Wells Fargo man turned the dial in the presence of many witnesses. The heavy door swung open, revealing the entire $50,000 in shining gold!

When the long-term prisoner heard this news he flew into a savage fury. Two years later he walked out of his cell, bitter and broke. His almost-perfect crime had been spoiled by a steam-shovel operator who hadn't even known about it until the big crane hit pay dirt.

ON THE RARE occasions when a railroader turns thief, he nearly always is caught, and often by another railroader. Consider the case of a man who called himself William K. McLaughlin. In 1953 McLaughlin hired out as a Long Island trainman. He worked several days collecting fares on commuter trains out of New York's busy Penn Station and then vanished without turning in the money. Later, he appeared in uniform on a couple of trains, collected many cash fares, and dropped out of sight again. It was most peculiar. But it didn't last long.

One day at Mineola, N. Y., McLaughlin made the mistake of boarding Trainman Frank Kalista's car. Kalista recognized the crook and tried to arrest him. McLaughlin fled and Kalista followed, deserting his train.

Meanwhile, other crew members called police, who finally collared the thief.

With McLaughlin safely in jail, Kalista called the Long Island's Movement Bureau at Jamaica and said: "I'm Frank C. Kalista, trainman. I deserted my train at Mineola."

Joe Valder, the assistant movement director, was more than a little surprised. "But aren't you the man who helped capture the guy we've been looking for?" he asked.

Kalista admitted he was, but apologized for having left his train to do so. Breaking an operating rule, even to apprehend a criminal, went against his code. Mr. Valder assured him, however, that he had done the company and the public a real favor, and his status as a good railroad man was above reproach.

Today you'll find very little crime along the high iron. Criminals fight shy of an industry whose gallant employes have caused many holdups to misfire.

SP Narrow-Gage

by FREEMAN HUBBARD

Owenyo station on the slim-gage line. Hotel (pictured at the extreme left) is a railroad company dormitory and commissary.
Nine photos by Southern Pacific Company

WHEN the Steam Age reached its peak many years ago and almost nobody thought of traveling inland or shipping freight except by rail, the United States boasted nearly 16,000 miles of slim-gage track. This mileage had shrunk considerably by August '41 when *Railroad Magazine* published a feature by Linwood Moody entitled "Sunset on the Narrow-Gage."

"Dusk is falling on a colorful chapter of transportation history—the narrow-gage," he wrote. "Shadows lengthen along rusted rails that are spaced two or three feet apart as eternal night slowly envelopes the group of audacious small roads which faced their dawn so hopefully in the 1850's, long before the Civil War, which basked in their brilliant noontide sun of the '80's, even challenging for a brief time the supremacy of standard-gage, and which, from then on, gradually passed into twilight."

At that time the country still had 15 common-carrier railroads or fragments of railroads with almost 1400 miles of slim-gage track. Today, barely 115.6 miles remain—45.2 on the Rio Grande's Silverton line in the Colorado Rockies and 70.4 on the Southern Pacific's Keeler-Laws branch in the Owens Valley of southeastern California.

Both are single-tracked lines of 36-inch gage. The Silverton run is a mixed train—the last one left on the continent that we know of—while the Southern Pacific branch hauls only freight, mostly mining products outbound.

The latter originated 78 years ago as part of the 300-mile Carson & Colorado, which extended from Keeler, Calif., to connect with the now-defunct Virginia & Truckee at Mound House, Nevada. The Southern Pacific took it over in 1900.

The C&C was built largely to serve gold and silver mines—hence the golden background in our front-cover painting—but as the veins of precious metal petered out, one portion after another of the line's northern end was abandoned. The lively passenger service, which included little yellow sleeping-cars, began to decline with the building of a paved highway in 1925 and quit altogether in 1932.

Owenyo, interchange point with the standard-gage SP, has no three-rail track. This is unusual in such operation. Slim-gage cars are spotted opposite conventional cars. A platform separates them. Their contents are moved by conveyor belts, hand trucks, or the backs of men.

One of the water-supply spots for locomotives, Aberdeen, had a tank which was filled by the action of a windmill, but in 1953 a storm blew down the windmill, and a gasoline-engine pump took its place.

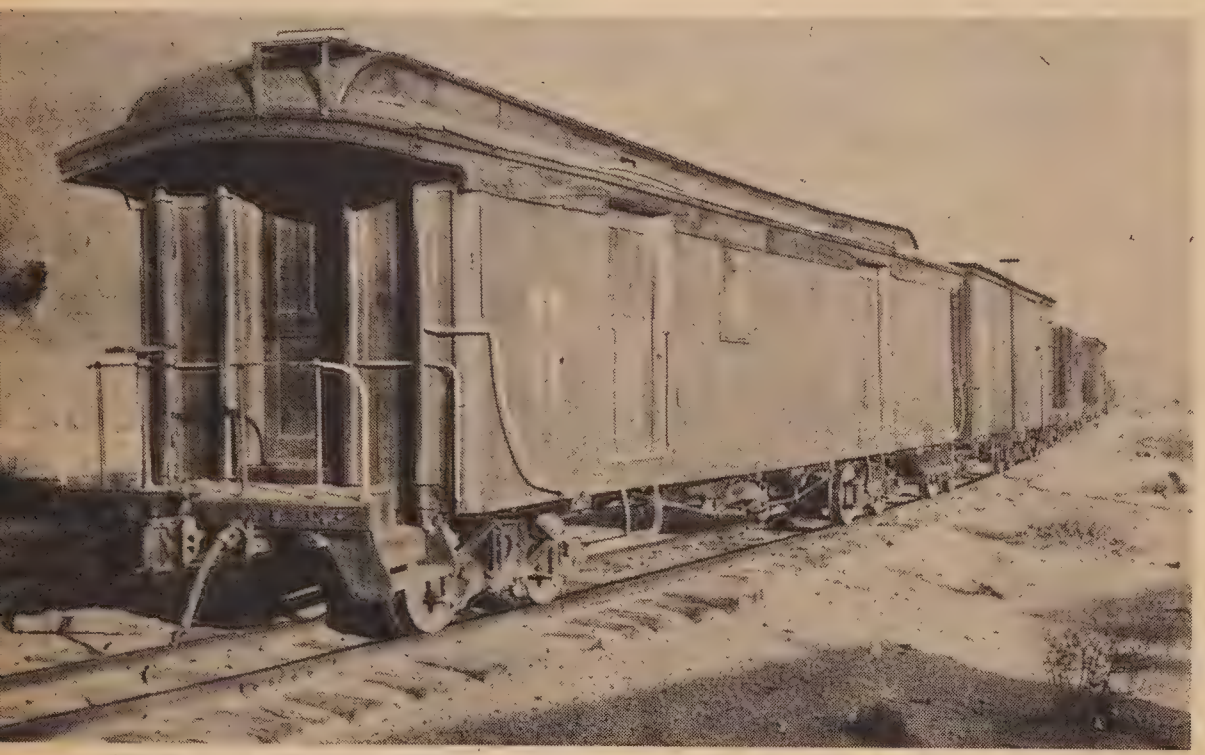
Keeler, southern end of the line, lies in the shadow of the White Mountains to the east, on the eastern side of Owens Dry Lake, on U.S. Highway 190, the only paved road that leads into Death Valley from the west. Keeler's population is about 75. Touching this end of the railroad in its early days was the wagon trail of "Borax" Smith, who hauled borax out of Death Valley with

Josephine Cole, the only woman working for the Keeler branch, has been shifted to a main-line job in Mohave.

America's only narrow-gage diesel locomotive, Southern Pacific No. 1, built by General Electric, has been doing nearly all of the freight work on the Keeler ranch since October 1, 1954. The same crew operates her and No. 9, a stand-by steamer.

No. 9, shown on old hand-operated turntable at Laws, is used in stand-by service only but only on a few days of each year.

The Keeler branch has two of these water-tank cars, needs 'em in dry wasteland.



SP slim-gage line has 189 wooden cars, including the baggage car pictured here.

Southern end of line, Keeler, has one lone industry, Sierra Talc and Clay plant.

his celebrated team of twenty mules.

In 1954 the SP branch acquired a new 45-ton, 450-horsepower, General Electric diesel, the only slim-gage diesel in America. She is standard in every respect except that her axles are shorter than those of conventional units.

The branch had been operating two Baldwin oil-burning steam engines. One of them, No. 18, built in 1911, was donated to Inyo County, Calif., and is displayed in the park at Independence, the county seat. The other, No. 9, built in 1909, is held for stand-by service and is used only a few days each year. Those days are the only times the old armstrong turntable at Laws is needed. Ordinarily, trains are turned on the wye at Keeler.

Since 1954, the year of dieselization, the Keeler agency has been closed, leaving Owenyo to handle the business by phone, and engine maintenance has been transferred from Keeler to Owenyo, and 40 obsolete wooden cars have been scrapped.

Today's equipment consists of 189 wooden cars, including boxcars, gondolas, stock cars, flatcars, two water cars, two oil tankers, one baggage car, and one caboose. There are 33 employes.

The annual railfan pilgrimage over the line on Memorial Day in a steam-powered special train has been discontinued because the old wooden flatcars, which were equipped with seats for the excursion, are considered unsafe.

The regular narrow-gage train runs five days a week. Round trips are made between Owenyo and Laws on Monday, Wednesday, and Friday but between Owenyo and Keeler only on Tuesday and Thursday. This arrangement gives the train and engine crew a "long day, short day" schedule.

The rail consists of about 56 miles of 35-pound rail and 15 miles of 62-pound rail. (Some steel was imported from Holland in 1880.) Further details on this line may be found in a book, *The Slim Princess,* written and published by John B. Hungerford at Reseda, Calif., and selling at one dollar a copy. The book is well illustrated.

D. O. Mills, one of the directors of the 300-mile Carson & Colorado, said the road was built "300 years too soon or 300 miles too long." Nevertheless, part of that line, which goes "from nowhere to nowhere," still performs a much-needed service. Unlike narrow-gages in general, this one still has a future. ●

No. 18, now retired from the Keeler branch to a public park at Independence, Calif., is seen wheeling a string of freight.

Last SP slim-gage loco, old No. 9, built by Baldwin 50 years ago, still uses this ancient water tower on the rare occasions when she is working.

New York's Park Avenue (originally called Fourth Avenue) had huge vents to let off smoke from trains that ran below it.
Frank Leslie's Illustrated Monthly

NEW HAVEN ELECTRIFICATION

by Sy Reich

MANY people have wondered why New York City's much-publicized Park Avenue, with its great hotels and smart shops, is so very broad, even more so than the elite Fifth Avenue.

The answer involves two railroad systems—the New York Central and the New York, New Haven & Hartford—that use the Grand Central Terminal. Before the lines were electrified, their jointly-operated tracks ran under the Avenue as they do today, but in those days the entire length of the street was perforated with large open vents to permit the escape of noxious smoke from steam locomotives and to provide fresh air for the passengers and crews.

Without such ventilation, the trains would have had to continue running through the city on street level as they did originally. Since electrification, however, the huge vents pictured on this page have been reduced to relatively small iron gratings.

As we pointed out in our December issue, New Haven's engineers planning for an electrified entry into the new Grand Central Terminal, then under construction at the foot of Park Avenue, had to decide whether to use direct or alternating current, and what voltage. General Electric offered seven different types of locomotives—four for DC, three for AC. Two of the DC's were designed for 600 volts DC overhead and two for 1200 volts DC overhead. One locomotive for each voltage was to weigh 97 tons, the other 75 tons.

These locomotives resembled the motive power that General Electric was then building for the Central, classes S-1 and S-2. They were to have a 1-D-1 wheel arrangement and be equipped with four gearless motors like their Central counterparts. Two of the locomotives proposed for 3300-volt AC catenary operation would have a 1-

CxC-1 wheel arrangement and would weigh 145 tons each. One was designed for 25-cycle AC supply and the other for 12.5-cycle AC current. A third AC locomotive, designed for 12.5 cycles, was to be of the side-rod type similar to the famous Pennsy DD-1's, with a 2-4x4-2 wheel arrangement.

General Electric promised that if the New Haven decided to use the DC locomotives, which were supposed to be more economical, and AC overhead, tenders built for them would house a motor generator to convert AC current from overhead to DC for use by the locomotive. Note that the AC locomotives had motors designed to operate on either AC or DC and did not require such a tender.

Unlike General Electric, which had always advocated DC, Westinghouse Electric Co. had been experimenting with AC within its own plant area and advised the New Haven Railroad to use high voltage in the catenary for economical transmission. It recommended 11,000 volts AC at 25 cycles and designed a locomotive having a B-BxB-B wheel arrangement for such a system.

Westinghouse also submitted proposals for two DC locomotives of 1-B-1x1-B-1wheel arrangement. In addition to a B-BxB-B locomotive to use on 15-cycle AC current.

The New Haven management studied these and other proposals. With the thought in mind of extending the electrification to New Haven, then to Boston, they contracted with Westinghouse to electrify the important and heavily-traveled main line from Woodlawn to Stamford with 11,000 volts AC at 25 cycles. This was a daring step, because at that time no railroad had been electrified at 11,000 volts while the commercial use of alternating current was practically non-existent.

We congratulate those pioneers for their wise choice, since all subsequent major domestic electrification used this same power supply. Later, extensive projects in Europe, too, adopted high-voltage AC, although at a different frequency so as to be compatable with commercial power frequencies.

THE NEW HAVEN'S route between Woodlawn and Boston, known as the Shore Line, follows the northern rim of Long Island Sound. Years before, Long Island Rail Road engineers, envisaging the LIRR as the main line between New York and Boston, had insisted it was impossible to build a

(Above) Experimental arch-type catenary bridge at Glenbrook, Conn., on main line of New York, New Haven & Hartford Railroad. (Below) Catenary construction and left-handed semaphores on Harlem River Line, looking toward New Rochelle Jct.

Both photos by the author

railroad along the coast of Rhode Island and Connecticut.

The route has 70 separate curves in 60.52 miles of electrified line between Woodlawn Jct. and the New Haven passenger station, the sharpest of which is west of Bridgeport, site of the two wrecks of *The Federal.* The longest stretch of straight track in this area is 15,392.78 feet, located between Larchmont and West Street.

When Pat Maginis was president of the New Haven he remarked that a passenger travelling between New York and Boston went around in seven complete circles. However, the road's Engineering Department has built a high-speed railroad despite the curves. Normal operating speed of express trains over the electrified main line is 70 miles per hour.

The engineers laid the rails on stone ballested roadbed and, by using super-elevation, have been able to maintain the normal 70 mph maximum speed around all but six of the 70 curves. Since 1905, when 100-pound rail was laid in a general electrification improvement, rail weight has been increasing constantly until now the standard is 131 along the four main-line tracks.

Three of the New Haven's branches also were electrified. The six-track 11.22-mile Harlem River branch between New Rochelle Jct. and the Harlem River and 138th Street in the Bronx provided freight entry for the New Haven into the big city and connections for the west and south. It was used also by commuter service between Harlem River and New Rochelle and was shared by the New York, Westchester & Boston, with the Harlem River serving as the New York terminus of that road.

When the Hell Gate Bridge was built, the Harlem River Line allowed New Haven passenger trains from New England to operate into Penn Station, New York, where Pennsy engineers would take over to complete their runs to Washington and other points on the Pennsy System.

The New Canaan branch, a single-track route between New Canaan and Stamford, where it joins the Shore Line, had its 7.86-mile length electrified in 1901, using 600 volts DC to be compatable with local streetcar lines controlled by the New Haven Railroad. Later, this operation was changed to 11,000 volts to coincide with the main line.

The Danbury 23.52 miles of single track extending between Danbury and South Norwalk, joined the electrification parade in 1925. In those days trains from New York operated as far as South Norwalk with electric engines. At South Norwalk a steam locomotive, deadheaded from an existing engine terminal at Stamford, would be tied onto the train for the rest of the journey to Danbury and Pittsfield, Mass.

To avoid deadhead milage between Stamford and South Norwalk for both steam and electric engines, the New Haven had to choose between building an engine terminal at South Norwalk or extending the electrification to Danbury, a division point which already had an engine terminal. They chose electrification.

No. 222, one of New Haven's EY-2b electric switchers, photographed by Sy Reich.

THE FIRST electrification project between Woodlawn and Stamford was a busy main-line and commuting road. In order not to interfere with railroad operations, work was done at night. In 1905, the job began with digging foundations for catenary steel bridges. The erection of these bridges across the tracks at intervals of several hundred feet gave visible proof to those who lived along the line that a big change was coming. Catenary bridges are used for hanging the catenary or overhead contact trolley wire

Every few miles the construction gangs erected anchor bridges, onto which catenary wire was firmly attached. The anchor bridges also contained circuit-breakers as well as other switch gear and transformers necessary to isolate any section of wire.

By insulating the trolley wires of parallel tracks from one another and by sectionalizing them along their length in much the same way that a model railroader sectionalizes his tracks to provide for control of more than one train, the railroad could disconnect any section of wire in case of emergency, while maintaining power on parallel tracks to allow operation of the line to continue. The isolation switch gear is generally controlled from interlocking towers.

The original catenary was different from the type used later. It consisted of three supporting wires parallel to the track and spaced apart by hangers to maintain them in the form of a triangle with the top side horizontal (paraallel to the crossties) and the opposite vertex (point) used to suspend the contact or trolley wire.

Two upper supporting wires are attached to insulators on the catenary towers. Thus the contact wire is supported parallel to the center line of track, following it around curves.

This triangular-shaped catenary was chosen to provide rigidity. But a few months of operation proved that rigidity was not desirable. The existing catenary was modified by installing clips to give it more flexibility, yet retaining its triangular set up. However, all subsequent construction was non-triangular.

A still different type of catenary was used on the next stretch to be electrified, the Harlem River Line. Once again, catenary bridges spanned the multiple-track line. From adjacent bridges two steel cables were strung parallel to the tracks. Heavy steel bars

were attached to them parallel to the ties. Simple steel catenary wire construction was hung from insulators attached to these steel bars which were placed between the catenary bridges. Copper wire fastened to the steel catenary wire was used for contact wire. This kind of suspension gave flexibility.

The 1925 electrification of the Danbury branch was unique. This single-track line did not require heavy-duty installation. Instead, single-steel upright bents supported a steel member across the track from which insulators were hung. This construction was similar to that used on numerous single-track trolley and interurban lines except that it was more substantial since the catenary weighed more than a single trolley wire. The 25-mile project was begun in October, 1924, and opened for passenger operation the following July. This is quite a record, considering that normal service was maintained during construction.

Throughout this period, the New Haven Railroad was installing overhead wire on many yard tracks and sidings. Oak Point Yard became probably the largest electrified yard in the country.

When the first project between Woodlawn and Stamford opened up in 1907, the road had 22½ route-miles and 110 track-miles electrified. When the last of the projects, the Danbury branch, was finished, the New Haven had some 112 route-miles under wire, including 562 track-miles, 195 miles of yard tracks, and 367 miles of main-line track. Except for several abandoned tracks on the Harlem River Line, and some yard and siding tracks that were de-electrified, the entire system is still intact.

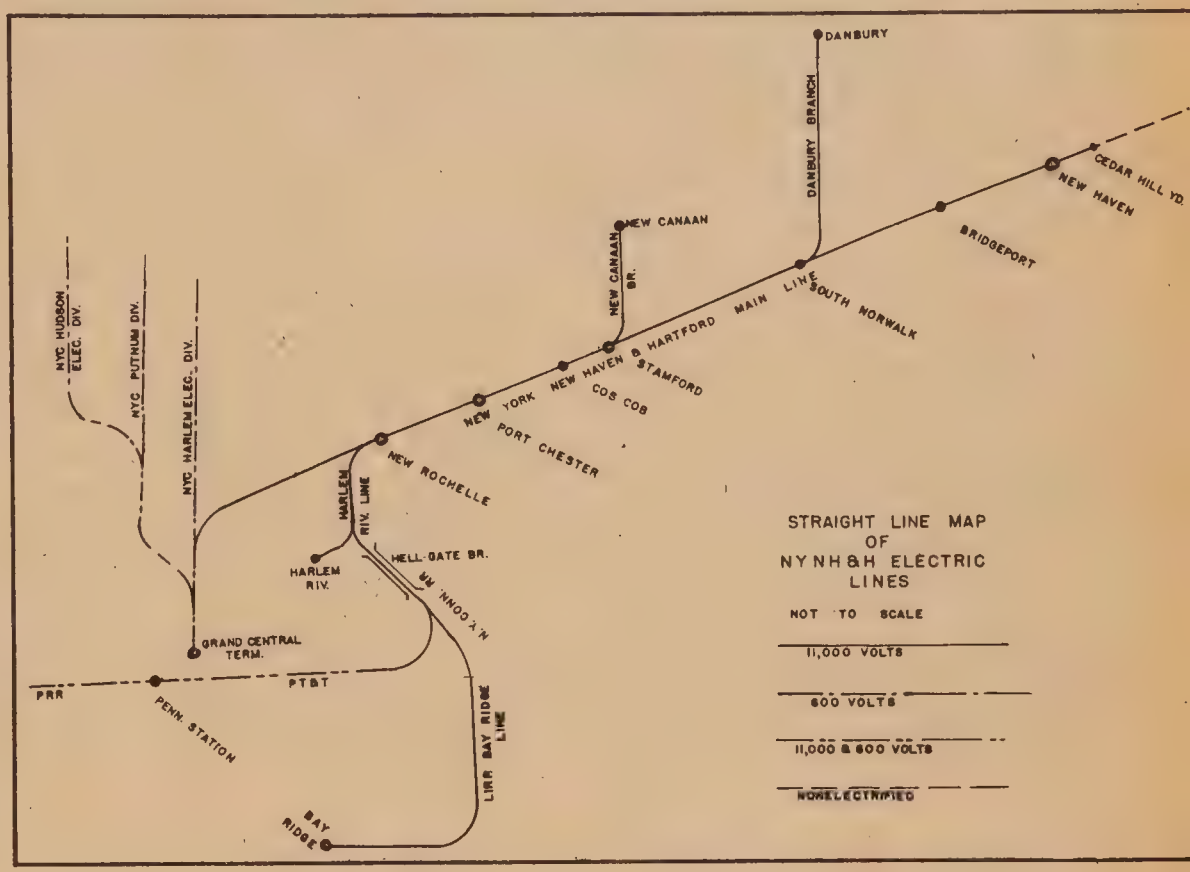
BECAUSE in 1905 the quantity of power that the New Haven required was not available commercially, the company built its own power plant at Cos Cob, Conn. There, in 1907, three Westinghouse 3750 kilovoltamp, single-phase, 25-cycle, AC generators were put into service. Each was driven by a steam turbine operating at 1500 rpm, using steam of 100 degrees superheated at 180 pounds per square inch.

The 28 boilers which supplied steam for the turbines were fired by coal. The generated 11,000 volts AC was stepped up in transformers to 22,000 volts for transmission along the main line. At each anchor bridge, transformers reduced the 22,000 volts to 11,000 for contact wire. Substations were located at Port Chester, Greenwich, Stamford, and South Norwalk.

As the trains grew longer and operated more frequently, power drain as Cos Cob increased. Additional equipment was installed there. At length, in 1915, a substation was built at West Farms to bring additional electricity from the Sharon Creek power plant.

At the time of electrification, signaling along the lines was revamped. A peculiar type of left-handed semaphore was developed to fit clearance requirements. In general, the electrified main line had four indication signals, with more indications provided at junctions and other places as needed. They used the color lights standardized by the Association of American Railroads.

In recent years there has been some signal and interlocking modernizations. Searchlight signals replaced semaphores on much of the main line. The New Rochelle interlocking machine was converted to a route type interlocker and consolidated with the interlocking east of New Rochelle. At New Haven, in 1954 a UR CTC push-button interlocking machine replaced several armstrong interlockings and switchmen on the ground.



Westinghouse Electric Co., which had been awarded the contract for the electrification, had the problem of designing a locomotive to haul through main-line trains in the electrified area at a schedule at least equalling that made by steam power.

Engineers of the electric company and the railroad decided upon many relatively small locomotives rather than a few big ones. These were equipped with multiple-unit connections so that as many locomotives as necessary could be coupled and controlled by one engineman.

Thus the New Haven pioneered the building-block technique, which later became popular with diesel-electrics. A given locomotive could be used singly on a light four-or five-car local or multiplied in combinations of three or even four to handle the longest and heaviest passenger or freight train with equal ease. Each unit had high availability.

Westinghouse, in conjunction with Baldwin Locomotive Works, built box-cab double-ended locomotives with a B-B wheel arrangement. Each was equipped with two pantographs to collect 110,00-volt AC current from the overhead on the New Haven and with eight under-running third-rail shoes to collect 600-volt DC current on the New York Central into Grand Central Terminal.

Motor and other auxiliary equipment design was complicated by the requirement that it performed on both 600-volt DC and 11,000-volt AC current. Not only were these locomotives highly successful but they were kept in daily high-speed passenger service until as late as June, 1947.

(Continued in our next issue)

INFORMATION BOOTH

A husky 2-8-2 on Duluth, Missabe & Iron Range hauls 33 ore hoppers near Eveleth, Minn.

1 *Now that the Norfolk & Western is mostly dieselized, which U.S. railroad is the last stronghold of steam power?*

There isn't any. Very few Class I roads are using any steam at all, except in stand-by service. Among those currently using steam, as we go to press, are the N&W, the Grand Trunk Western, the Union Pacific and the Duluth, Missabe & Iron Range.

The DM&IR, owned by U.S. Steel Corp., is probably the only Class I road in the country that still owns more steam locomotives than diesels. It owns 88 steamers, 71 diesel units, and is still operating some of its steam power. Also, it operates some diesel units leased from the Great Northern and the Bessemer & Lake Erie.

"We do not have any diesels on order," writes H. A. Anderson, Executive Assistant to the President of DM&IR, "and no specific date has been set for complete dieselization, nor have we made definite plans for ultimate disposition of steam locomotives when and if they are retired from service."

A new mimeographed price list of photos of DM&IR steamers may be obtained from Rail Photo Service, 93 Massachusetts Ave., Boston 15, Mass.

The Union Pacific's steam-diesel situation is summed up as follows by Edwin C. Schafer, the road's director of press-radio-TV relations: "For all practical purposes, UP is dieselized during its normal operating season. However, during the peak seasons of the year—August and September—we very often bring steam out of storage and put it in operation as required.

"At present we are operating twelve 800 Class steam locomotives between Omaha and Cheyenne and ten of the 4000 Class ('Big Boys') between Cheyenne and Laramie."

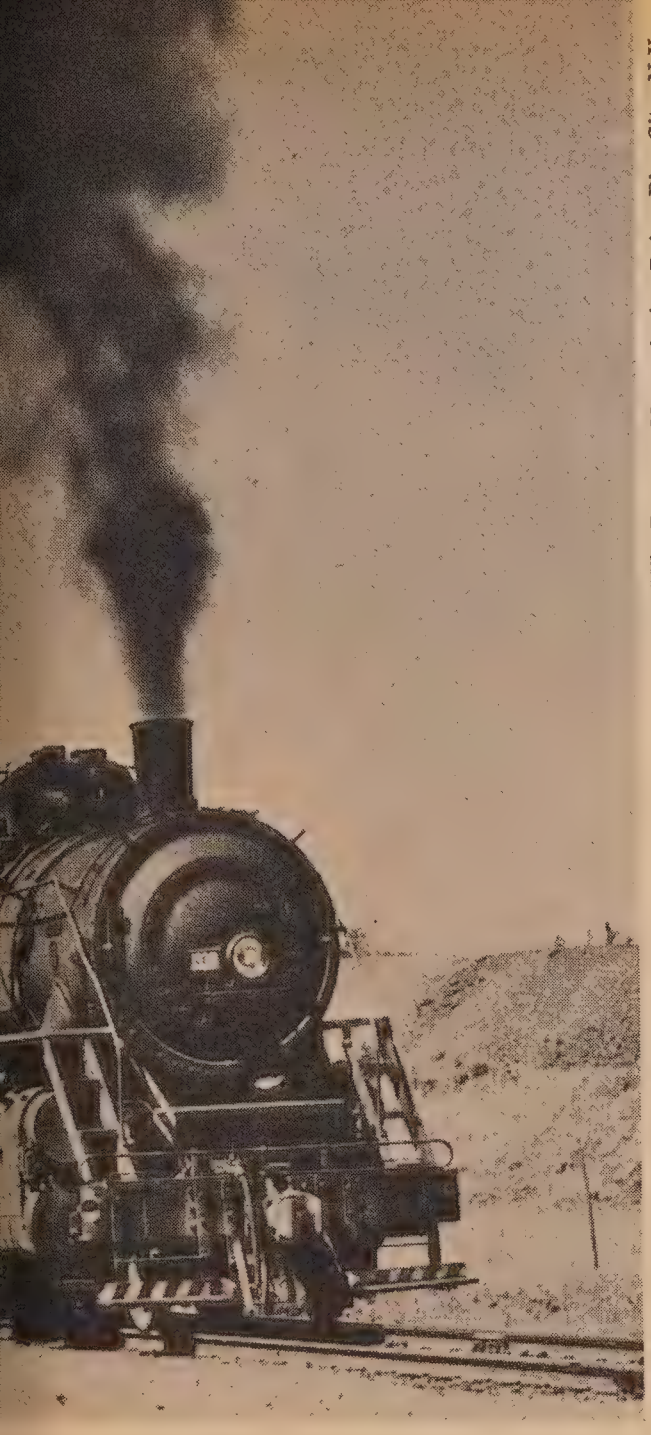
The UP still owns 142 steam locomotives: 76 in unserviceable condition, stored, 44 in serviceable condition, stored, and 22 working. They consist of 4-8-4's, 4-6-6-4's, 4-8-8-4's, 2-8-2's, 0-6-0 switchers, one 2-10-2 and one 4-6-0.

2 *Why did the second diesel unit pictured on page 34 of the October issue emit smoke and steam?*

Art Stensvad, Union Pacific engineman who made the photo replies: "Probably it had a broken piston, faulty injectors, or a faulty supercharger—about the only troubles we get that are likely to produce such smoke."

3 *How much does it cost to equip a boxcar with roller bearings?*

Nobody could make a dependable estimate without knowing the factors involved in a given case, such as how many cars, the size of each, the car-building plant where the job is to be done, and so on. If, for example, a bid



Mike Runey, 5 Mountainview Drive, Pine City, N.Y.

ASK BARBARA: **Railroad questions are answered here every issue by our research expert—as many as space permits. Top priority is given to subjects that seem to be of wide general interest. Address Miss Barbara Kreimer, Railroad Magazine, 205 E. 42nd Street, New York 17, N. Y. No replies will be sent by mail.**

calls for equipping 1,000 cars with roller bearings, the bearings themselves would cost about $725 per car. Add to that the cost of installation, which varies at different plants. Some plants make a deduction for the friction bearings not used.

4 *Does the Lackawanna have any steam engines left in use or on display?*

No.

5 *Who originated the trackside slogan "Stop, Look and Listen"?*

So far as is known, signs bearing this legend were first placed at crossings along the line of the Gettysburg & Harrisburg between Gettysburg and Carlisle, Pa. This road, now a part of the Reading System, was opened to traffic in April, 1884. Its vice-president at the time, Col. J. C. Fuller, said that the wording was taken from an opinion delivered in 1880 by Justice Edward M. Paxson, of the Pennsylvania Supreme Court in a case against the Shenango & Alleghany over a crossing wreck. The Justice disqualified the plaintiff's suit because he did not "stop, look and listen before attempting to cross the track." These words were called to the attention of Col. Fuller, and thus became the warning sign at all G&H crossings. In July, 1891, they were adopted by the Philadelphia & Reading throughout its system.

6 *What is a slip coach?*

On certain British runs a train cuts off its rear coach at a station siding where the passengers unload at their leisure. This is a slip coach. Later in the day the passengers reboard the car and a train picks it up for the return trip.

7 *A history of the* Rocket, *please.*

If you mean the old engine on permanent display at Franklin Institute, Philadelphia, she was built in England and delivered to the Port of Philadelphia in March, 1838, then carried by boat on the Schuylkill Canal to Reading, Pa. She went into operation on the Reading-Pottstown line of the Philadelphia & Reading in May of that year, remaining until 1879.

8 *Is it true that a railroad actually laid tracks on ice and ran trains across a frozen river?*

Yes, several roads have done it. For example, during the severe winter of 1851-'52 the Philadelphia, Wilmington & Baltimore (now part of the Pennsy) laid tracks over the ice near the mouth of the Susquehanna River and on those tracks they carried 10,000 tons of freight, baggage and mail in 1,378 cars.

9 *Peter Josserand says in* "Pushbutton Yards" (*Oct. '58, page 24*): *"Sometimes you didn't know if you were standing between two tracks or between the rails of the track on which the car was moving." How come? Wouldn't you know whether or not you were standing on ties?*

In deep snow you might not.

10 *What are Clejan-type cars?*

Lightweight piggyback flatcars used for railroad, highway and sea transport. Each Clejan car carries one 40-foot trailer and one 35-foot trailer, three 24-foot trailers, or two to four containers. It carries both interchangeably. Because of light weight less motive power is required than is used to move the same number of ordinary piggyback cars.

Only one man is needed at the car while loading or unloading. He can "tie down" a trailer in about a minute and a half, compared with four to six minutes and four men required on older piggyback equipment. Average time for a tractor to pick up and load a trailer on the new car is five minutes, compared with ten to fifteen for conventional equipment.

11 *I see that the Pennsy is engaged in a bridge project on the Delaware River at Philadelphia. Tell us about it.*

This is no ordinary project. When completed it will be the longest double-track vertical-lift bridge in existence, 542 feet between end bearings. It came about because Congress authorized a channel with a clear width of 400 feet. Other specifications were channel depth of 35 feet at mean low water and a minimum clearance of 135 feet above mean high water. A vertical-lift span was the

Nickel Plate freight, 121 cars, westbound out of Cleveland, crossing the Cuyahoga River, January 1958.

Peter J. Eisele, 1496 East 221st St., Euclid 17, Ohio

only practical way of meeting such requirements.

But why is a 542-foot span being built? That's because the U.S. Army Corps of Engineers raised the ultimate required channel width to 500 feet. And while they were at it, they eliminated a curve in the channel by shifting the center line 500 feet to the west.

12 *When was the first Camelback built?*

In 1877, at the Philadelphia & Reading shops, Reading, Pa. She was sent to the Paris Exposition of 1878 where she was modified into a peculiar camelback shape to meet low clearances on the French Northern Railway. (For details, read "Double-Cab Engines," by H. L. Kelso, in our Oct. '57 issue.)

13 *Is it true that the Great Northern once operated a 40-car passenger train?*

No. The longest was a 26-car consist of coaches, sleepers, a diner and head-end equipment out of Minot, N. D. to Spokane, Wash., in Oct., 1957.

During World War II, 25-car trains of passenger equipment often were dead-headed on both long and short runs over the GN to meet military requirements. They began with 35-car trains, but soon were reduced to a maximum of 25 cars.

14 *What are the apertures in a covered hopper-car roof called?*

Hatches.

15 *Please furnish a history of the New York Central's now defunct Putnam Division.*

The "Put," as the line has been known by generations of commuters, came into existence in 1869 as the independent New York & Boston Railroad.

A year later, work was in progress on the 58-mile line that ran from the Harlem River in New York City, north to Brewster. In 1872 the N&B consolidated with the New York, Boston & Northern, which went bankrupt in 1876. Then the N&B separated from it and became the New York, Westchester & Putnam. In 1894 the name was changed to the New York & Putnam, and the little road was leased to the Central.

Last May 29 the last passenger train ran on the "Put" from the Bronx to Brewster.

For further details, see William L. Rhode's illustrated feature on the Putnam Division in our January, '49 issue.

16 *Please publish the number of Class I steam, diesel and electric locomotives in the U.S.A., from 1945 to 1958.*

The following statistics were furnished by the Association of American Railroads:

Year	Steam	Elec. (Units)	Diesel (Units)	Total
1945	38,853	842	3,816	43,530
1946	37,551	832	4,441	42,841
1947	35,108	821	5,772	41,719
1948	32,914	829	8,089	41,851
1949	28,964	817	10,888	40,691
1950	25,640	788	14,047	40,494
1951	21,747	780	17,493	40,036
1952	16,078	756	20,492	37,343
1953	11,787	699	22,503	35,009
1954	8,650	656	23,531	32,872
1955	5,982	627	24,786	31,429
1956	3,714	606	26,081	30,433
1957	2,447	585	27,186	30,248

17 *What is the highest point in America reached by a railroad?*

The summit of Pike's Peak in Colorado, 14,110 feet above sea level.

18 *What kind of trackage agreement did the Erie and the Lackawanna make recently?*

On June 24 the ICC authorized the two roads to use jointly the Erie's 75.76 miles of double-tracked main line between Binghamton and Gibson, N. Y., and to share the real estate tax and operating and maintenance costs on a gross tonnage basis. Under this deal, the Lackawanna is removing 54 miles of its double-tracked main line, 18 miles of its single-tracked main line, and much of its Elmira yards. The remaining segments of DL&W track in that area will be used by both roads. Connecting track is being built at Binghamton, Gibson and Big Flats.

The project is expected to save at least $1,000,000 a year. It met with ICC approval because, as the map shows, the two roads closely paralleled each other and were not at any point more than 1.5 miles apart.

19 *Tell us about the Pennsy museum at Northumberland, Pa.?*

It is not exactly a museum, but an old enginehouse where about a dozen historic Pennsy steam locomotives and several dozen other pieces of outmoded equipment are stored, mostly under canvas. Usually it is not open to the public, but permission to see the collection may be obtained from the Pennsylvania Railroad, Public Relations Dept., Philadelphia 4, Pa.

20 *I read somewhere that a subway train rescued some people from possible drowning. Is this true?*

Yes. It happened within the past year, when the motorman of a New York subway train en route to Rockaway was crossing the long trestle that connects the beach with the mainland, when he saw a man beside the tracks waving for help. Below in the choppy water was a small boat with a woman and two children who were in danger. The motorman stopped his train and helped to save them.

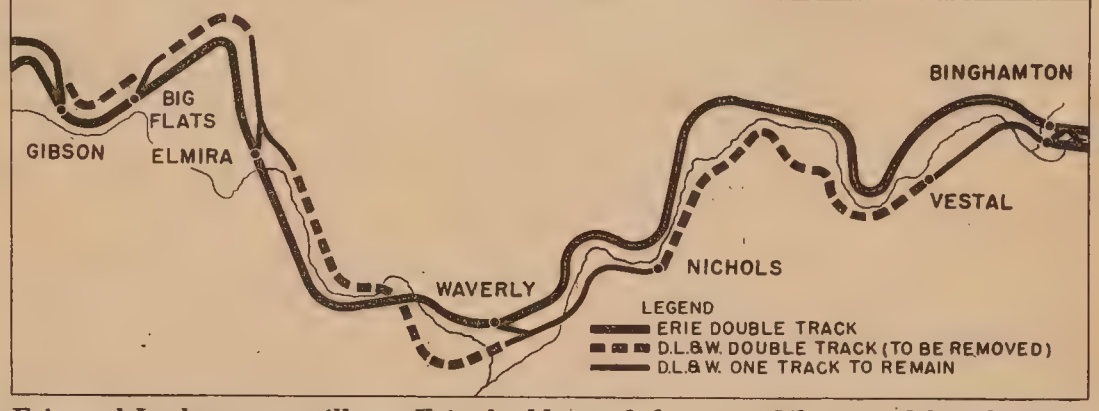
21 *Where can I get detailed information on land-grant railroads?*

From the Association of American Railroads, P. R. Dept., Transportation Bldg., Washington 6, D. C.

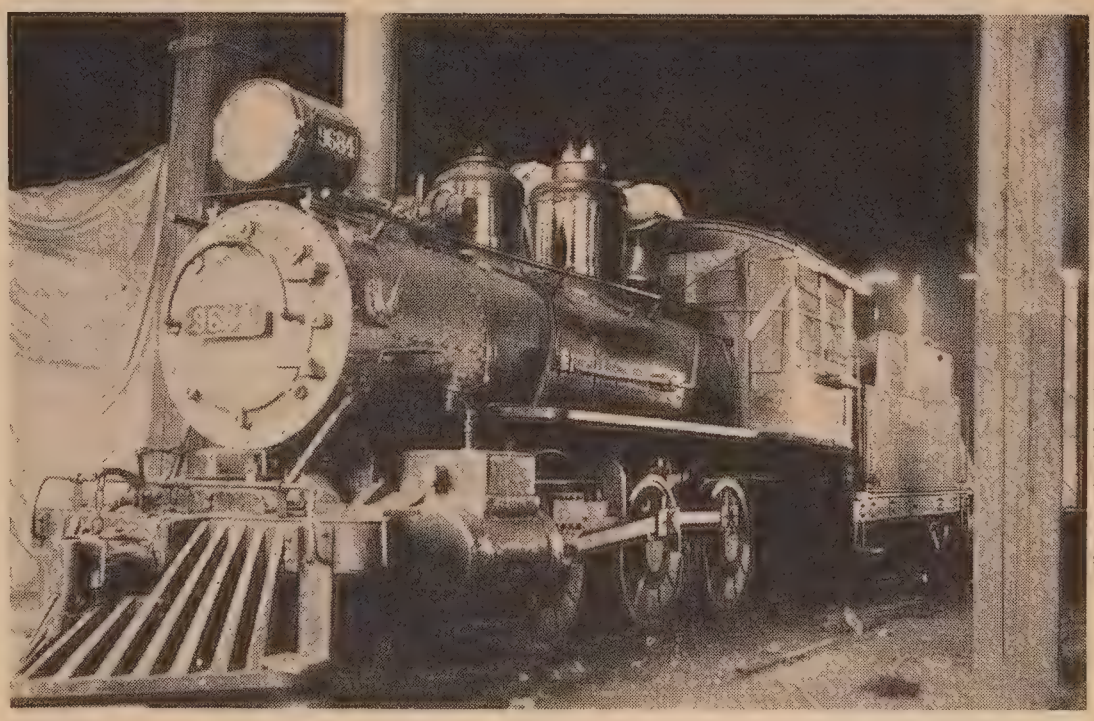
22 *Give us a brief history of the Old Colony Railroad.*

On March 27, 1872, the Old Colony was incorporated in Massachusetts, encompassing lines from the southeastern part of the state and as far north as Lowell and Fitchburg. On March 1, 1893 it was leased to the New Haven for 99 years, making it a New York-Boston trunk line as well as bringing the growing South Shore area into the system. With this acquisition, the New Haven operated 1,493 miles of track.

New Haven trustees terminated the lease in 1936 because the OC was losing money steadily. The two companies were reorganized in 1947 with the proviso that if losses from OC passenger service exceeded $850,000 in any 12-



Erie and Lackawanna will use Erie double track between Gibson and Binghamton.



Thomas T. Taber III, 43 Hillcrest Rd., Madison, N. J.

Old Pennsy narrow-gage No. 9684 stored in the museum at Northumberland, Pa.

month period during the first two years, that service would be discontinued. The New Haven claims that during the first year losses from the Old Colony line were $3,800,000.

One of the famous Old Colony trains was the Fall River Line *Boat Train*, which, until the demise of the famous steamship line in 1937, was the oldest name train in America. It ran between Boston and Fall River, connecting with ships which plied to and from New York in the protected waters of Long Island Sound and Narragansett Bay.

Some of the early Old Colony locomotives had such picturesque and historic names as *Monitor, Merrimac, Miles Standish, Daniel Webster,* while others were named for cities and towns.

About six months ago plans were afoot to abandon the line, but an agreement to insure permanent operation is being worked out for acceptance next July 1st.

23 *By what formula is the tractive effort of a steam locomotive figured?*

The formula is $T = \frac{KPC^2S}{D}$

T is the tractive effort.
K is a constant, say 85 percent.
P is boiler pressure in lbs. per sq. in.
C is diameter of cylinder in inches.
S is stroke of pistons in inches.
D is diameter of driving wheels in inches.

24 *What do the railroads need most?*

More revenue-producing traffic, of course. And what they need least is regulation by federal and local governments. John W. Barriger, president of the Wheeling & Lake Erie, put it this way in *The Locomotive Engineer*:

"Without regulation the railroads would have modernized three times as fast as they have. If the ICC hadn't blocked the traffic and earning power of the railroads, we would now be able to go from Chicago to the Pacific Coast in 28 hours instead of 44."

We find it hard to understand why our railroads are not granted merger and consolidation rights such as those enjoyed by oil, copper, aluminum, steel, utilities and other large industries. Considerable waste would be avoided if this country had only two competitive coast-to-coast rail systems, as Canada has.

25 (*a*) *Does the Santa Fe still maintain the* Cyrus K. Holliday *train?* (*b*) *Give the number and class of remaining Santa Fe steam locomotives.* (*c*) *Did the line ever use Vanderbilt tenders?*

(a) Yes, this reproduced train is used for special celebrations and is stored at various points along the line. (b) Although the Santa Fe has been dieselized for five years about 80 of its steamers are stored for emergency use. They are: Classes 2900, 3751, 3776, 5000 and 5011. (c) No.

26 *Which form of freight transportation gets the most mileage from a dollar's worth of fuel?*

The railroad, of course. That much fuel moves 20-ton trucks less than 12 miles, a 40-ton airplane a little over 3 miles, or a 40-ton boxcar 150 miles.

27 *What is a Hydrorailer?*

A trade name for a 12-ton railroad-highway truck crane mounted on a tandem axle truck with two sets of rail wheels. The latest model, H-5, is equipped to handle a ½-yard digging clamshell or a ¾-yard materials-handling bucket.

The Hydrorailer is used on tracks to carry rails, lay tracks, work signal systems, and various types of maintenance work along the right-of-way; off the rails, for truck transfer operations at warehouse depots, sand-gravel pits and scrap yards. On the highway it moves between jobs at speeds up to 50 mph. On and off the rails, crane and clamshell operations are controlled by one man. Manufacturer is Bucyrus-Erie Co., South Milwaukee, Wis.

28 *Where is the world's busiest railroad passenger station?*

Probably Clapham Jct. Station, near London, on the British Railways, which handles 2,070 passenger trains every 24 hours.

29 *When did the New York Central* (*a*) *retire its last steam locomotive?* (*b*) *Where are its remaining steamers stored?* (*c*) *How many are there, and what classes?*

(a) In May, 1957. (b) At Riverside (Cincinnati), Ohio. (c) Twenty-nine, classified as follows:

Freight		Switchers	
Class H-7	5	Class U-2	8
Class L-2	4	Class U-3	12

30 *I retired from Railway Express service in* 1954 *at age* 58, *with a disability annuity. I could do light work and get a job that paid over* $200 *a month. How would it affect my annuity?*

Since you retired on a disability annuity, your earnings are limited to $100 per month. If you earn this amount you will lose your annuity for that month. If you accept the position referred to, your annuity would be cancelled completely. If you cease work at some future time your annuity will be reinstated upon request in the same amount you

Southern Pacific Co.

New type Southern Pacific freight car resembles a roofless, doorless box car. Has tall steel sides that slope gradually to the top. Cars are used for hauling wood chips from Oregon and California mills to fiber-board manufacturers. The Espee had 500 such cars built to order since this product has become a commercially important one.

The first eleven carloads of coal move through Norfolk & Western's new Sandy Ridge Tunnel in Southwestern Virginia. Event opened for transportation a great new empire of coal from this area which is expected to produce about 3,000,000 tons this year. Watching the movement is a group of Norfolk & Western men who had handled the unloading of welded rail in the tunnel.

are receiving now, provided your physical condition remains unchanged.

You must notify the Board if and when you start work and tell them the amount of your earnings. When you cease work, or become 65 (whichever is earlier), notify the Board and ask for reinstatement of your annuity.

31 *Which train makes the world's longest daily non-stop passenger run?*

The *Elizabethan* between London and Edinburgh, on the Britain Railways, 393 miles.

32 *What is rock bolting?*

A new technique reportedly used for the first time on any railroad in America by the Reading System on two of their tunnels, the 121-year-old 1,932-foot Black Rock near Phoenixville, Pa., and their longest, 3,409-foot Mahanoy, east of Mahanoy, Pa.

Developed for Bethlehem Steel Co. and recommended by the U.S. Bureau of Mines as a sound measure for roof control, it involves the use of special bolts anchored into holes drilled in the rock of the tunnel roof, which are then tightened to compress the stone and stabilize the ceiling. This pioneering effort has resulted in more economical tunnel maintenance and improved safety conditions.

33 *Where is Great Northern's famous steam locomotive,* William Crooks?

On permanent exhibit in St. Paul Union Depot. Brought to St. Paul by steamboat in 1862, she was the first locomotive to operate in Minnesota.

(Incidentally, Jim Scribbins is compiling a comprehensive list of retired steam engines preserved in parks and museums of the United States and Canada, which we will publish in the near future.)

34 *I think I have stumbled onto two lengths of the original 56-pound rail used in building the first transcontinental railroad. Tell me: (a) Did it weigh 56 pounds per yard? (b) What were its dimensions? (c) What data was rolled into the web of the rails, such as year, weight and manufacturer? (d) Have any other "finds" of this rail been reported?*

(a) Yes. (b) Width of base, 3-31/32 inches. Height of rail, 4-1/4 inches. Width of web, 13/32 inches. Width of head, 2-7/32 inches. Weight per yard, 56.4 pounds. (c) No record is available. (d) Wells Fargo Bank & Union Trust Co. in San Francisco has in its museum on display with their "Gold Spike" exhibit, a section of pioneer 56-pound rail.

35 *Why does the* Official Guide *(Sept. '58) still list Burnham Hill, Vt., on the old Hardwick & Woodbury, abandoned in 1937?*

"We have overlooked it all these years," the *Guide's* editor told us, "but our October edition is dropping it."

36 *What is meant by the word "peddler" in rail lingo?*

A freight car or local freight train

Chesapeake & Ohio's new Car Location Information Center at Huntington, W. Va. Through this center, which went into operation last June, C&O can tell shippers and receivers almost instantly the exact location of any freight car. CLIC ties together the world's largest railroad-type network of 24,000 miles of circuits connecting 238 teletype installations and 54 traffic offices in the United States and Canada.

from which shipments are distributed at intermediate points according to waybill information. The first of many popular fiction stories written for us by the late John Johns, New York Central conductor, was "The Night Peddler" (May, 1930 issue).

37 *Which was the first American railroad to carry freight?*

Nearly all of the early roads hauled some freight, but the Philadelphia & Reading was the first to transport a million tons in one year (1844), most of the tonnage being coal.

38 *What were silk trains?*

Trains that streaked across the country about a half a century ago from San Francisco and other Pacific ports, carrying rich cargoes from the looms of Japan. Each trainload of silk represented a fortune and was carefully guarded en route. Someone wrote a poem called "The Silk Train," which captured the glamor and romance of the iron horse carrying the wealth of the Orient to speed a pioneering industry. We don't know the name of the author, but here are the verses:

Highball! Highball! She is on her way,
Out of the yards in the twilight gray,
Gathering speed at each turn of wheel,
Pounding impatiently over the steel,
Her headlight dimming the light of the stars
That wondering gaze on the thundering cars.
Clear of traffic the rails tonight,
For nothing may dare delay the flight
Of a train of silk from Frisco.

Pounding hard up the mountain steep,
Drifting down through gorges deep,
Making the walls of the canyon ring.
As the shriek of the whistle goes echoing.
Highball! Throw the levers, the tracks are clear.
The precious cargo is near—is here!
The mountains crossed, her dangers done,
She throbs with pride at the end of the run—
A train of silk from Frisco.

39 *Do you know the name of the engine that ran under her own power from Philadelphia to Chicago to take part in the World's Columbian Exposition in 1893?*

Yes, the Pennsy's ancient John Bull, the first locomotive to be equipped with a cowcatcher.

Running Extra

When you answer a question requested in Information Booth *or* Running Extra, *be sure to mention the item number and date of issue.*

F. D. MESSINGER, Sr., Western Pacific yardmaster at Keddie, Calif., questions our statement that the longest stretch of CTC operated by a single dispatcher is 331 miles of track on the Milwaukee. He points out that WP has a 344-mile stretch between Elko, Nev., and Portola, Calif., operated by one dispatcher at Elko.

AN ANONYMOUS READER would like information on the Intercolonial Railroad (now Canadian National) that ran through the Maritime Provinces about 1905.

G. M. KIDDER, RFD #1, South Acton, Mass., wants data on photos of the old Green (Cadillac) Mountain Cog Railroad of Desert Island, Bar Harbor, Maine. He thinks two of its engines found their way to the Mt. Washington Cog Railroad in New Hampshire and are currently in use.

DOES anyone know when flag signals were first attached to locomotives?

BRIEF ACCOUNTS of four Nevada lines, requested by Edward Wilsey, come from G. Gableton, Tampa, Fla.:

Las Vegas & Tonopah was completed in 1906, abandoned in 1918. Tonopah & Goldfield, completed 1904, aban-

doned 1948. Bullfrog & Goldfield, completed 1906, abandoned 1927. (Absorbed by Tonopah & Tidewater some years prior to abandonment.) Tonopah & Tidewater was built around 1905 from Ludlow, Calif., on the Santa Fe. to Beatty, Nev.

All four were built to serve the gold mines around Goldfield as the result of a boom in 1903 which lasted until 1911. The towns have been abandoned for many years. Today virtually nothing remains but a few brick walls.

A PAT on the back comes from Selma J. E. ("Espee") Prescher (former Southern Pacific telegrapher), 10665 Pearmain St., Stonehurst, Oakland 3, Calif. "The way you answer questions in Information Booth is highly educational," she writes. "Many of them appeared in a set of seven examinations I took recently."

JOHN VAN TESLAAR, 224 East 38th St., New York 16, N. Y., wants advice on obtaining information regarding private Pullman cars available for purchase.

ADDITIONAL data on Boston & Maine steamers (Item 13, Oct.) comes from David Neelon, 244 Florence Rd., Waltham 54, Mass. "You are right about No. 622," he says. "However, No. 3713 was sent recently to the Edaville Railroad Museum in South Carver, Mass. for permanent display, along with No. 6000, *The Flying Yankee*, built in 1935."

He adds that No. 1455 (a 2-6-0, numbered 100 before 1911) is in the same museum, while No. 494, a 4-4-0, is on display at White River Junction, Vt.

HISTORIES of the Red River & Gulf and the Groveton, Lufkin & Northern are requested by W. D. Sherman, 511 N. 6th St., Crockett, Texas.

WAYNE ELLIS, 145 Scenic Rd., Springfield, Del., seeks information on the old 3-foot gage Sumpter Valley Railway which ran from Baker to Bates, in Oregon, and had an interchange at Baker with the Union Pacific. He wants a brief history, an all-time engine roster and other data.

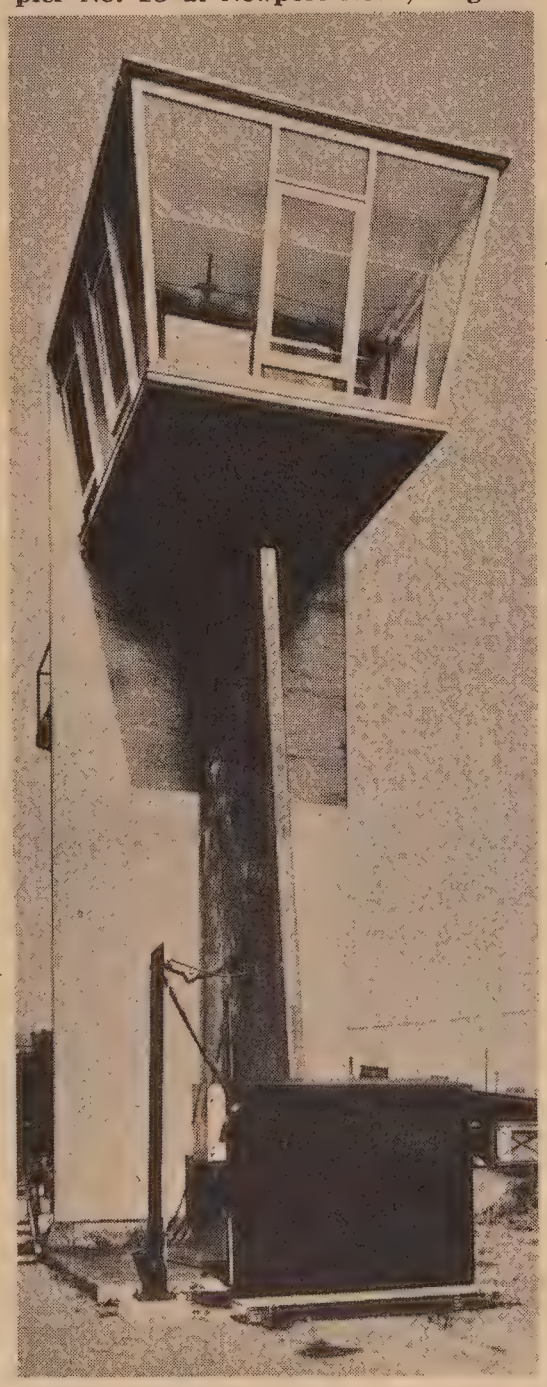
COMMENTING on our definition of *articulated* (Oct. issue, item 5), Cornelius Hauck, 5915 Miami Ave., Cincinnati, Ohio, writes: "An articulated is a locomotive in which the main superstructure (boiler, etc.) is suported on trucks rather than on a rigid frame. A Shay, Climax or Garratt is a true articulated. A Mallet, in which one truck or frame section is fixed and one free to move, is technically a semi-articulated.

"These distinctions generally are observed in down-to-earth railroad circles. Only the Mallet types are called articulated engines. More commonly, the term Mallet is confined to compound engines, while the simple or simple-expansion Mallets are known as Simple Articulateds."

HUGH STEPHENS, 223 Trenton Blvd., Sea Girt, N. J., furnishes a brief history of the Galveston, Houston & Henderson, in response to Robert Hicks' request:

"This standard-gage road was incorporated in 1853, opened in 1857 and sold at foreclosure in 1860 and 1871, and again in 1882, when it was purchased by Russell Sage and Jay Gould. In 1895 the company made a contract with the Missouri-Kansas-Texas and the International & Great Northern whereby these roads would have trackage rights over the GH&H for 40 years. The line operated 50 miles of track from Houston to Virginia Point and Galveston. Rolling stock included 12 locomotives, 4 passenger cars, 2 freight cars and 37 service cars. Headquarters were at Galveston, Texas."

Modern design: Concrete retarder tower at the rear of Chesapeake & Ohio's coal pier No. 15 at Newport News, Virginia.



SHORT LINES in Arkansas, Louisiana and Texas interest Jimmie Tatum, 412 West First St., El Dorado, Ark., who wants photos and histories.

DATA on Erie 0-8-8-0 Camelbacks rebuilt to 2-8-8-2's may be obtained by writing Warren D. Stowman, 2011 W. Godfrey Ave., Philadelphia, Pa. (Enclose stamped envelope.)

A SHORT HISTORY of the Grand Rapids & Indiana has been compiled from letters sent in response to Carl Dudley's request:

This standard-gage line was incorporated in July, 1896, as a successor to the Grand Rapids & Indiana, sold at foreclosure. The GR&I also operated the Cincinnati, Richmond & Ft. Wayne, the Muskegon, Grand Rapids & Indiana and the Traverse City Railroad. The company is controlled by the Pennsy and operated under lease for 999 years from Jan. 1, 1921.

Line of road was from Fort Wayne, Ind. to Mackinaw City, Mich. (366.51 miles); branches, from Walton Jct. to Traverse City, Mich. (25.92 miles); and Muskegon Jct. to Muskegon, Mich. (36.87 miles). General office is at Grand Rapids. Rolling stock consisted of 13 locomotives, 11 passenger cars, 2,107 freight cars and 12 company cars.

ACCORDING to "Carload Andy" Ospring, 1322 N. Ontario, Burbank, Calif., Charles Nelson's tin pot (page 41, Oct. issue) might well be an old-time engineer's coal oil torch. Before the turn of the century many a hogger had his own made to order in the size and shape he desired.

WHO has a picture of *The Albany*, the first locomotive to draw cars on the high iron across the Missouri from St. Joseph? Byron E. Guise, Marysville, Kan., believes she was built by William Norris of Philadelphia in 1840. She had 12x20 inch cylinders and 48-inch drivers, weighed 17 tons and burned wood.

INFORMATION on the Pennsy's old Coalport yard and car shops at Trenton, N. J., is sought by Harry Goodwin, 2 Maple Ave., Bordertown, N. J. Several of his relatives worked there.

Don Wood, 29 Mt. Haven Drive, Livingston, N. J.

Last of Canadian National Moguls posed for her picture at Tara, Ontario, in July, 1957. Note the old oil-lamp signal jutting out near the engine's 86-inch stack. The train is a freight southbound from Owen to Palmerston.

86

Gainsburg Jct., N. J. (Right) Tracks of the Lehigh & New England RR. (Left) N. Y., Susquehanna & Western, with picnic special in siding.
Walter Zullig, 475 Oak Ave., Maplewood, N. J.

EAST JERSEY Railroad & Terminal. An industrial road at Bayonne, Interchanges Jersey Central and the Lehigh Valley.

Hoboken Shore Railroad. This switching road in Hoboken, N. J., serves many waterfront industries and docks on the lower Hudson River. Principal interchange is with the Erie.

Hudson & Mnahattan Railroad: A subway and private right-of-way rapid-transit line connecting midtown and downtown Manhattan with Jersey City and Hoboken. Owned by the Pennsylvania Railroad, it operates joint service with the Pennsy to Newark. Passenger service only.

Lehigh & Hudson River Railroad. Mainline operation. An important bridge route between the PRR at Easton (from the south and west) and the New Haven road at Maybrook (to the North and New England). Also serves some industries along its 85.8-mile line. (All-time loco roster in our Dec. '58 issue.)

Lehigh & New England Railroad. Main-line operation serving both as a bridge route between Pennsylvania and New England via Maybrook and the New Haven road and an industrial line covering the Bethlehem - Allentown areas. Its main stem runs between Hauto and Campbell Hall (Maybrook), 126.5 miles.

Morristown & Erie Railroad. A switching road serving the industries between Morristown (connection with the Lackawanna) and Essex Falls along its 10.5-mile route.

Mount Hope Mineral Railroad. Owned and operated by the Jersey Central Lines, it runs between Wharton and Mount Hope, 3.6 miles.

New Jersey & New York Railroad. Owned and operated by the Erie, it is a principal commuter carrier between Jersey City and Thiells, 38.9 miles. Also serves industries along its line.

New York & Long Branch Railroad. Jointly owned and operated by the Jersey Central and the Pennsy, it serves the North Jersey Coast with passenger trains provided by both carriers. Its main line between Perth Amboy and Bayhead Jct. connects with many CNJ and Pennsy branches which are used for freight operation over the NY&LB.

New York, Susquehanna & Western Railroad. A main-line road operates

New Jersey Shortlines

Roster Compiled by Sy Reich

East Jersey Railroad & Terminal

Class	Road Nos.	HP	Builder	Bldr's. Mdl.	Whl. Arngt.	Trac. Eff.	Weight	Dates	Notes
—	17,18	550	GE	65 ton	B-B	32,500	130,000	1950	

Hoboken Shore Railroad

—	700-701	380	GE	44 ton	B-B	26,400	88,000	1947	

Hudson & Manhattan Railroad

Complete roster in June '58 Railroad Magazine

Lehigh & Hudson River Railroad

—	1-13	1600	Alco-GE	RS-3	B-B	60,000	240,000	1950-'51	m

Lehigh & New England Railroad

OE-1-A	701-710	1500	Alco-GE	FA-1	B-B	59,375	237,500	1948	m
OE-1-B	751-753	1500	Alco-GE	FB-1	B-B	57,325	229,300	1948-'49	m
OE-2	651-663	1500	Alco-GE	RS-2	B-B	62,400	249,600	1949	m
OE-3	611-616	1000	Alco-GE	S2	B-B	57,775	231,100	1948-'49	

Morristown & Erie Railroad

—	16	1000	Alco-GE	S2	B-B	57,500	230,000	1952	

Mount Hope Mineral Railroad

Owns no motive power; uses Jersey Central Lines motive power.

New Jersey & New York Railroad

Owns no motive power; uses Erie Railroad motive power.

New York & Long Branch Railroad

Owns no motive power; uses CNJ and Pennsy motive power.

New York, Susquehanna & Western Railroad

—	150,151	150	Whitcomb	none	B	14,000	42,000	1942	(1)
—	202-206, 208	1000	Alco-GE	S2	B-B	69,000	230,000	1941-'42	
—	230-244 (even only)	1000	Alco-GE	RS-1	B-B	74,250	247,500	1944-'45	
—	231,233	1000	Alco-GE	RS-1	B-B	72,750	242,500	1943	
—	246-256 (even only)	1000	Alco-GE	RS-1	B-B	72,900	243,000	1947,'53	

Pennsylvania-Reading Seashore Lines

BS-8	6006	800	BLHW	S-8	B-B	49,625	198,000	1951	
BS-12	6017-6021	1200	BLHW	S-12	B-B	60,000	240,000	1953	
BS-12m	6028-6033	1200	BLH	S-12	B-B	60,000	240,000	1956	m
BS-16m	6022,6023	1600	BLHW	AS-16	B-B	60,500	232,000	1955	m
BS-16ms	6000-6005 6007-6016 6026,6027	1600	BLHW	AS-16	B-B	60,500	242,000	1950, 1953, 1956	ms

Rahway Valley Railroad

—	16,17	600	GE	70 ton	B-B	34,700	139,000	1954,'51	

Raritan River Rail Road

—	1-6	900	GM-EMD	SW-900	B-B	61,230	248,500	1954	m

Staten Island Rapid Transit

SA-3	9026-9033	1000	Alco-GE	S2	B-B	57,500	230,000	1943-'44	
SG-1	8800	400	GE	65 ton	B-B	32,775	131,100	1943	

The Wharton & Northern and Mount Hope Mineral railroads, owned and operated by Jersey Central, use engines such as these two being serviced at Communipaw.
Sy Reich, 92 St. Marks Place, New York City

Raritan River diesels have MU jumpers: usually 2 or 3 are used on a road train.
Electro-Motive Div., General Motors

Pennsy-Rdg. Seashore Lines owned six RDC-1's before a pier fire destroyed two.
Sy Reich

Alco-GE built 13 of these diesel road-switchers for the Lehigh & Hudson River.

Trenton-Princeton Traction

Owns no motive power. Uses Reading motive power. Reading No. 65, built in 1932 and retired 1944, was used in passenger service.

Union Transportation

Owns no motive power now; uses Jersey Central motive power.

Wharton & Northern Railroad

PD-25	2000-2002	2000	BW	AIA-AIA	63,500	381,000	1946-'47	s,2
PD-25	2003-2005	2000	BW	AIA-AIA	64,320	386,000	1948	s,2

freight and passenger trains between Jersey City and Hainsburg Jct. and M&U Jct. It has important passenger commuter runs between Jersey City and Butler as well as bridge and originating freight service.

Pennsylvania-Reading Seashore Lines. Jointly owned by the Pennsy and the Reading Co. but operated separately, this road provides main-line passenger and freight service between Camden and principal points in southern New Jersey, including coast towns.

Rahway Valley Railroad. "Just a short line," as its stationery says, it nevertheless renders vital service to industries along its 7.1 miles between Roselle Park (connections with the CNJ and LV) and Summit (connection with the Lackawanna).

Raritan River Rail Road. An important and prosperous short line connecting the New York & Long Branch at South Amboy and the Pennsy at New Brushwich with switching service to many large industires along its 7.1-mile main line. Jointly owned by the Pennsy and the Jersey Central. (This is the only line we know of, aside from the Long Island, which still uses "Rail Road" as two words in its corporate name.)

Staten Island Rapid Transit. A main-line road connecting Staten Island with the mainland. Owned by the Baltimore & Ohio but operated separately. Major connections with the CNJ and the Reading.

Trenton-Princeton Traction. This industrial and switching road, owned and operated by the Reading Co., runs 5 miles between Trenton and Lawrenseville.

Union Transportation Co. An 18.87-mile switching carrier running between Shrewsbury Road and Pemberton, main connections with the P-RSL.

Wharton & Northern Railroad. Owned and operated by CNJ, this main-line and switching road extends between Lake Jct. and Greenpond Jct., 15 miles.

Notes and Abbreviations

Rosters are accurate as of August 30, 1958. For the purpose of our rosters, a short line is a common carrier railroad of less than 399 route miles. Compiled from data supplied by Superintendent of the EJRR&T; V.P. and G.M. of the HSRR, Chief Mech. Officer of the L&NE, Chief Mech. Officer of the NYS&W, President and G.M. of the RVRR, V.P. and G.M. of the RRRR, Gen. Supt. of Equip. of the B&O, Supt. of Motive Power and Rolling Equipment of Reading Co., and a book, "Locomotives of the Jersey Central," by Crater and Owen.

Abbreviations: m—multiple unit; s—steam heat boiler; GE—General Electric; Alco-GE; American Locomotive Co.-General Electric; GM-EMD—Electromotive Division, General Motors Corp.; BW—Baldwin-Westinghouse; BLH — Baldwin-Lima-Hamilton; BLHW.— Baldwin-Lima-Hamilton-Westinghouse.

(1) Gasoline powered, bought from US Transportation Corps. (2) Transferred to CNJ 12/52 and reclassed PD-30.

A sight you will never see again: car No. 381 of the Waterloo Railroad crossing beautiful Cedar River at Waterloo, Iowa, in 1956. Line is no longer electrified.
Stephen D. Maguire, 411 River Rd., Belmar, N. J.

No. 7203 (left), Chicago Transit Authority's last southbound car, passed 7213, CTA's last northbound run, as trolley service ended in the city June 22, 1958.
Miles McGowan, 2622 E. 77th St., Chicago, Ill.

First 2 Vista Dome cars on any interurban line (one shown here) operate in Japan.
Sinichi Miyazaki, 1299 Ohno, Inaba-Cho, Inaba-Gun, Gifu-Ken, Japan

Steve Maguire's

TRANSIT TOPICS

THE LIST of streetcar and interurban lines of North America in our Oct. '58 issue is being whittled down. No longer can you ride the one-car Waterloo-Cedar Falls route of the Waterloo Railroad, once a large interurban system. Gone is the road's last electric operation, reports Elmer R. Carr, member of the National Railway Historical Society. At the time of the last run, Aug. 1, passenger car 381 and line car 80 were the only pieces of electric equipment left. Iowa has no regular trolley passenger service now.

Steve Maguire

Two freight roads go off our list. The Toledo & Eastern, Ohio's final remnant of operating interurban trackage made its graveyard run with no publicity or fanfare last July 16. They abandoned the entire line, we learn from Joe Galloway, Toledo, Ohio.

Consider the Piedmont & Northern. This ex-interurban line had been dieselized except for about one-third of a mile on Mint Street in Charlotte, N.C., where two electric freight motors, 5101 and 5103, were retained because of rail too light for diesels. Now, with rebuilt track on that street, according to Thomas G. Lynch, a company official, the two motors have been retired; P&N has no more electric operation.

However, Martin Corley of Flushing, N.Y., adds to our listing the South Brooklyn Ry., operating 5.94 miles of freight track. SB is owned by New York City Transit Authority. The line is part overhead, part third rail. Plans call for replacing the remaining overhead with third rail. There is some justification for including SB in our list, because its locos used to run over track served by trolleys.

ALTHOUGH Waterloo, Iowa, has lost its trolleys, tramways still serve the Belgian town for which it was named.

Electric cars take visitors to the site of Napoleon's last battle.

THE FIRST Vista Dome cars on any interurban line were placed in service last July 11 by the Kinki-Nippon Ry. of Japan on its 85-mile run between Osaka and the shrine city of Ise, reports Wally Higgins, now with American foreign service in Japan.

There are two Vista Domes in a three-section articulated electric car carried in the center of the trains. Each dome unit seats 22 persons, with lettering in English, "Vista Car." The trains made the run in less than two hours.

"This is top speed for our railways," comments Sinichi Miyazaki, 1299 Ohno, Inaba-Cho, Inaba-Gun, Gifu-Ken, Japan. "The Vista Dome cars have seat radios and public telephones.

"A new fast *Business Limited* electric car has just begun to run between Tokyo and Osaka on the Tokaido main line of the Japanese National Railway. Our lines still use many steam locomotives, but electrification is increasing.

"Fortunately, I am a railway employe, so I travel on a free pass to take photographs."

A PLAN for rapid-transit service suggested by Robert Caldwell, a 22-year-old economics student at Sydney University in Australia, is being considered seriously by the N.S.W. Transport Department and city authorities. It would utilize fast tramcars over existing rights-of-way, using both subway tunnels already built for a proposed railway line and surface tram tracks in outlying areas.

Caldwell spent months preparing the maps, plans, and estimates for his idea that would create a transit line to Sydney's eastern suburbs. Hugh Ballment, Harris Park, N.S.W., sent us the news.

BIRNEY car 236 of the Conestoga Transportation Co., which used to run in Lancaster, Pa., has been removed from the Landis Valley farm where fans had stored it for eleven years. It has been taken to the site of the new proposed trolley museum in Tanesboro, N.J., where members of the Metropolitan Philadelphia Ry. Assn. are working to restore it and perhaps some day operate it over their trackage now under construction.

JOE McMILLAN, Yorktown, Texas, says that in Austin, Texas, it is still against the law to shoot Indians from trolleys on Congress Street. The law is still there although there are no longer any trolleys or Indians in that part of Texas. Who knows of other obsolete transit laws still on the books?

NEWS South of the Equator comes from Arnold Reid, Defense 665, 5, F., Buenos Aires (R. 46), Argentina, who made a trip recently to Mendoza, Argentina, and Santiago, Chile.

He writes that the city of Mendoza has five car lines and 63 trolleys running. All are single-trucked, of a European appearance, carry bow-type collectors, and are painted cream color. Only one, No. 35, showed any efforts of rebuilding into more modern design. In Santiago our correspondent found three separate trolley systems, one an interurban. Downtown, five routes are served by U.S.-built cars of modern design but in bad condition.

A small trolley line, *Ferrocarril Electrico Santiago Oeste,* operates for two miles along the side of one street in Santiago with doors leading from the sidewalk side only. Mr. Reid counted 12 cars, two in the process of being welded into double-truck cars. All but two are single-truckers. One is open.

An interurban line located near Plaza Italia runs about 14 miles to Puente Alto. It is narrow-gage (one meter) and was a steam road until electrified in 1925. Cars are big blue-and-cream wooden interurbans with GE and Westinghouse equipment. A few ex-steam passenger cars have been electrified. This line, *Ferrocarril Del Llano De Maipo,* runs mostly at shift changes for a paper factory, with a few cars for school children and lunch hours.

When his train passed through Batuco, Chile, Mr. Reid saw a horse tramway operating to the railroad station. It was a single-truck open car running on wide-gage track.

In Buenos Aires the municipally-operated system has sold 20 trolleys second-hand to Rosario and another ten to Tucuman, both in Argentina. Mr. Reid found five cars in the Rosario barn. All had been repainted for service, but he was told that only one would run. The city cancelled the contract for the other 15 cars.

A crowded car, No. 4, on F. C. Del Llano De Maipo at Santiago, Chile.

Arnold I. Reid, Denfensa 665, 5, F, Buenos Aires, (R. 46), Argentina

CARS from 35 to 51 years old still running on the Market-Frankfort rapid-transit line of Philadelphia Transportation Co. will soon be replaced by more than 200 new pieces of equipment, reports Elliot M. Block, 84-49 Elmhurt Ave., Elmhurst, N.Y.

Philadelphia Suburban Transportation Co. ended rush-hour service on its Westgate Hills line Aug. 22, only a few days after the PUC gave them permission to abandon the route, the last remnant of the West Chester line that quit five years ago. Buses took over.

The abandoned track was entirely in the center of the median strip of the West Chester Pike for four miles. The final runs, Aug. 24, were railfan extras sponsored by the Metropolitan Phila. Railfans Ass'n.

With this abandonment, the only service on the West Chester Pike median strip is the Ardmore line that branches off at Llanerch. We understand that Ardmore cars now run non-stop between the 69th Street terminal and Llanerch in rush hours, with buses making local stops.

HOW true this tale is, we can't say. Max Wilcox, 429 West Ave., Euclid, O., tells us that years ago a single-track shuttle line ran between St. Clair and Euclid Avenue in Cleveland, served by a single car that was not often patronized.

Word got around to the regular motorman that the company was considering abandoning the line for lack of riders. Next day, when he turned in his fare box, it was loaded to capacity—something unheard of prior to that time.

"Boy," said the cashier, "your line sure did a lot of business today!"

250 PUPILS BID TRAINS GOOD-BYE

Children of Piedmont Ave. Public School, Oakland, Calif., rode Key System's entire line C on regular runs, one class each school day, during its last two weeks of electric operation. Pupils boarding cars and (Right) Conductor Robejohannes collecting fares.

Here we see Motorman-Engineer Barnes explaining how the third-rail works and (Right) Trainmaster Peterson, in white shirt, telling a class, its teacher, and the school principal, Ralph Kerchum, about Key System operations at San Francisco bridge terminal.

"Not at all," said the motorman. "I made two round trips and got no business, so I've been working Euclid Avenue all day."

Max also tells us that during the rushing business of World War II, a new motorman in Detroit stopped his car at the intersection of another line where there were several switches in the tracks. He got out and went over to a gas station on the corner, asking the attendant, "How do I get from here to Woodward Avenue?"

MUSEUM of Central Ohio Railfans at Worthington, O., according to Mr. Wilcox, now has two miles of operating trackage and may add two miles more over the old Columbus, Delaware & Marion right-of-way, which would take them to the Columbus city limits. A highway overpass would have to be built. However, the existing CD&M abutments are usable and the Norfolk & Western is donating girders to carry tracks across the highway. This museum is receiving some help from residents of Worthington. Recently Jay Maeder donated a roll sign from the C&LE for use with ex-C&LE car 119 at the museum.

TWO ex-Lehigh Vall. Transit freight cars are in the Philadelphia subway, writes Jack N. Ross, 8031 Leon St., Philadelphia, Pa., a PTC subway dispatcher, commenting on our review of the LVT 800 series book in the October issue.

Car T18 is actually running in the subway. The other one, freight motor T-17, has not been rebuilt and is in dead storage at Fern Park yards.

Two PTC streetcar routes, Nos. 56 and 60, are still being operated with two-man crews on weekdays only.

New Publications

NEW ENGLAND fans especially will be interested in these two publications of the Connecticut Valley NRHS

No other school in Oakland had a train stop at its front door. Dean Stone, one of San Francisco's top commercial photographers, whose daughter was a fifth-grade student at the school, went along with her class on its trip and made this series of pictures.

Homeward bound after an unforgetable ride, the boys and girls waved a sad farewell to the long-familiar Key System. Since then, the shining steel rails have been torn up, the air horns and clanging bells of the big orange trains have been silenced forever.
Dean Stone, 360 Kearny St., San Francisco, Calif.

Chapter's *Transportation Bulletin*. May, '58 issue deals with rolling stock of the Eastern Massachusetts Street Ry. in eight illustrated pages written by O. R. Cummings, it is the first in a group of detailed stories of the system.

Transportation Bulletin for July '58 covers the 1300 and 1700 class cars of the Bay State Street Ry. which later became part of the Eastern Mass. system. Both issues may be bought at 25 cents each from Roger Borrup, Warehouse Point, Conn.

Pacific Railway Journal, quarterly publication of Southern Calif. Chapter, R&LHS, carried a 12-page illustrated story of the Angels Flight Railway in Los Angeles in its Feb. '58 issue, written by Donald Duke. It is available for $1; *Pacific Railway Journal*, 2304 Melville Dr., San Marino, Calif.

The June '58 *Journal* devoted 55 pages, illustrated, on the Milwaukee Road, including its electrification of more than 600 miles of track. Actually, it's a reprint from rare issues of *Baldwin Locomotives* magazine. Price, $2, same address.

Issue 19 of the *Dispatcher* gives eight pages, with some choice pix, to a history of San Diego transportation by Eric Sanders. Price 25 cents, Railway Historical Sociey, P. O. Box 9351, San Diego 9, Calif.

The Tram That Went to America, a 16-page brochure by D. E. Phillips and F. K. Pearson, tells the story of the tramway system at Blackpool, England, with map and roster. It emphasizes car 144, donated to Seashore Electric Railway Museum at Kennebunkport, Maine. Price 2 shillings, 3 pence; send international postal money order to Light Railway Transport League, 245 Cricklewood Broadway, London, N.W. 2, England. The League will use part of the sale to pay for shipping Liverpool Corp. tramcar 293 to the United States. ●

A RAILROAD classic copyright 1947 by Popular Publications, Inc.; originally titled "Jawbone"

"Let's get this railroad rolling again," said Elmer

DELAY AT MESQUITE

The Silver Arrow *Was an Extra-Fare Train With Rights Over Everything—Well, Not Quite Everything*

by HARRY BEDWELL

A MILE-LONG freight train on the Southwestern Railway stumbled hastily into the passing track and subsided with the grunt of brake shoes. Then the eastbound *Night Hawk* blazed across the desert like a comet, staining the moonlight with red splashes as she tripped the automatic blocks far in advance. The lonely train-order station at Gravity, hunched under a tall semaphore, sighed and creaked.

The buzzer above the telegraph instruments, under kerosene lamps, squawked like an old hen caught in a wire fence, warning that the *Night Hawk* was only three minutes away. Eddie Sand, the night operator, clipped tissue train orders in two hoops and fastened them to the rack beside the main track. The *Hawk's* headlight raced in over the bulge of the world.

Eddie saw the fireman leaning from the rocking cab and saw the brakeman snare the hoops as the passenger train flashed by. She faded at once into the vast solitude. Then the freight train lumbered out of the pass and followed.

The carrot-topped boomer put on the head phone. Phantom voices crowded the wire with cryptic jargon as the dispatcher and the train-order men threaded the swarming traffic along the single track. The high iron was loaded tonight.

"Number 92 by Gravity at 7:57," the brass-pounder intoned.

He read a book with placid concentration, but a veteran boomer is always alert and Eddie knew when an automobile came stealthily down the rutted road. It didn't show a headlight when it stopped outside.

Yeah, Trainmaster Stanley was on the prowl, showing up in unexpected places, using his Ford instead of riding the trains, looking for somebody to throw the book at. He stood suddenly in the doorway.

"Conductor Hawkins reports," he said ominously, "that you stopped the *Sunbeam* here by handing up the wrong set of orders."

"I'll bet he did," Eddie agreed. "He'd write that one up and make it sizzle."

Going by Gravity at fifty miles per hour, it had taken the *Sunbeam's* engineer fifteen seconds to discover, from the orders snatched from the rack, that the dispatcher had cleared the wrong train. He was well over a mile away before he got his train stopped. Then the air stuck. Eddie mused on the beguiling recollection of old "Scrap Iron" Hawkins, in blue and gold, stepping down from an air-conditioned Pullman and walking back under the withering desert sun to pick up the proper orders.

"He pawed up the earth," the boomer recalled in delight.

"Look here!" Stanley's eyes were showing red, "You delayed the *Sunbeam* twenty-two minutes.' '

"Who says I did?" Eddie drawled.

"Hawkins says so."

Eddie shook his head gravely.

"Then who did delay her?"

"You're doing the investigating. My job keeps me busy enough."

Stanley ran a quick eye over Eddie as if he were tempted to break the boomer in two, but something warned him to leave before the temptation took a strong hold of him.

Eddie watched him fog the moonlight with dust as he drove away. That brass collar looked too hard for trouble in the wrong places. He'd make it tough for the home guards, but he'd better take the far side around the boomers.

The station throbbed with the distant pulse of a Mallet blasting in out of the shimmer, chewing up the barren miles. Eddie put on the head

HELP US KEEP THE THINGS WORTH KEEPING

All is calm, all is bright. In America we are free to worship as we please, where we please. And we worship in peace.

But like so many precious things, peace doesn't come easy. Peace costs money.

Money for strength to keep the peace. Money for science and education to help make peace lasting. And money saved by individuals.

Your Savings Bonds, as a direct investment in your country, make you a Partner in strengthening America's Peace Power.

The chart below shows how the Bonds you buy will earn money for you. But the most important thing they earn is *peace*. They help us keep the things worth keeping.

Think it over. Are you buying as many Bonds as you *might?*

HOW YOU CAN REACH YOUR SAVINGS GOAL WITH SERIES E BONDS *(in just 8 years, 11 months)*			
If you want about	$2,500	$5,000	$10,000
each week, save	$4.75	$9.50	$18.75

This shows only a few examples. You can save any sum, buying Bonds by Payroll Savings or where you bank. Start your program now!

HELP STRENGTHEN AMERICA'S PEACE POWER

BUY U. S. SAVINGS BONDS

The U.S. Government does not pay for this advertising. The Treasury Department thanks, for their patriotic donation, The Advertising Council and this magazine.

phone, toed the pedal in the dark under the table, and spoke into the transmitter:

"Coming west."

The dispatcher in his cozy room two hundred miles away grunted dejectedly into his phone. You could hear him chewing gum furiously.

"That's Extra 4727 West," he said, "and she'll go right by your door at high speed. No more for her."

The second buzzer would warn him of her near approach. Eddie took up his book again. It dealt with the colorful history and legends in that part of the West. He relaxed and read.

Excessive minutes walked off the clock, and still the second buzzer remained mute. At length the shimmer of a headlight through the bay window reflected on the printed page.

Eddie wheeled in his swivel chair. The freight train was crawling slowly into the passing track.

"That westbound's not going anywhere," he told the transmitter. "She's heading in."

"The hell she is!" the dispatcher raged. "Now what do you suppose happened to that promoted bakehead? He's been dragging his feet all the way. Find out what stopped him."

A mile to the east, the hind end of the freight train cleared the switch and stopped. Then the engine cut off and chugged up to the station.

"Bricks" McLennon, the engineer, came down the ladder from the high cab. Bricks was round and bulging, and he looked like an amiable spider crawling out of a dark web.

"Eddie," he said, "tell the dispatcher I've got to cut and run for water." He boosted his stub length onto the telegraph table. "I told them before I left Yarbo they was givin' me too much tonnage." He plucked a cigar from his blue shirt pocket. "But you can't tell a yardmaster much," he added.

"Water," Eddie murmured. "Seems like I heard the DS mumbling about the poor run you were making."

"Yeah," Bricks fouled the office with smoke. "I had to whale hell out of that old Malley. This side of October, with cottonwood leaves on the rail, she slipped clean down. I ain't got six inches of water left from the beatin' I gave her, so I'll have to run light to Mesquite and get some. Ask the dispatcher for an order that'll bring me back."

EDDIE phoned. Then he stated: "The DS sure is snowed under. Says he wants you back here for Number 43 so you can follow her right out, and no foolin'. He's got a fleet of freight trains coming out that he doesn't want you tangled up with. Extra 3444 West is right behind you. Let her by at Mesquite, then hurry back."

Bricks glanced at his watch.

"He's goin' out on a limb, young feller, bringing me back against Forty-three. Anything happens, she's stuck. And you don't lay out that streak of varnish without their slappin' on a penalty. Ho-kay," the hogger sighed. "It's his railroad. Where's the train order to get me back?"

"He says it will delay you too much for him to line you up," Eddie explained. "He told me to flag you back."

"Wants me to do it on jawbone?"

"Yeah, that's what he said."

You don't urge a hogger to bust the rules. If Bricks' train were hung up here, there would be a jam. Sometimes, when the Southwestern's traffic was tight, you moved on verbal instructions and somebody's say-so instead of by train order, to save the minutes. But it wasn't in the book. You did it, but if something slipped they'd tack your hide on the roundhouse wall.

Bricks puffed furiously and brooded. He didn't have too much time to make the round trip to Mesquite against the passenger train, and it was asking for trouble to do it on jawbone. But the line was flooded with traffic. Often some slight mischance caused it to stall, and no good railroader likes to be stuck.

"If Stanley caught me at it," Bricks mused, "he'd start a file that'd grow as big as a book." The oldtimer sighed and got down from the table. "I guess we'd better not tie up the railroad. I'll leave it up to you, Eddie, to protect me comin' back."

Eddie hooked the loop of a train order hoop over the two semaphore levers.

"A warning to myself," he said, "that after the 3444 follows you out, I'm not to give another westward train the board till you get back."

Pretty soon the marker lights of the lone engine drew together and died far down the main track and then Extra 3444 West, a drag of empty reefers, rocked by.

Silence hung like crisp gauze. The moon turned the far reaches to dusty gold, edged with black. Shadows flitted and flowed through the haze. Could be ghosts of desert men—trappers and prospectors, freighters, and railroaders—come from their lonely graves to a meeting in the moonlight. Eddie had been reading about them in his book.

The clock stared down at him, wagging rebuke, pointing grimly at elapsed time. Too many seconds had tripped from that inexorable pendulum since Bricks had gone off to fill his tank with water. Roaring trains took the minutes in long swallows and you had to be thrifty of time when the high iron was hot. Bricks should have returned ten or twelve minutes ago. Number 43 would hit the buzzer within two minutes, and Bricks wasn't here to let her go.

If you halted that streak of varnish out here in the solitudes, you would be yanked out of service and made to explain. You'd better give a sound reason or you'd never get back. Forty-three was the *Silver Arrow*, the Southwestern's bid for the extra-fare trade. She was a lightweight streamliner, all-Pullman, and officials in the big terminal building scrutinized her every move.

THE DISPATCHER'S phone sawed through the quiet. Eddie answered, "Yeah, this is Gravity."

"Did that light engine get back?"

"Not yet," Eddie reported.

"Wonder what's holding him up?"

"If Bricks is in trouble," Eddie said, "he'll get himself out of it."

"Yeah, I know," the DS fretted, "but Forty-three'll be on your block in a minute and I wanted him back there for her. The fleet's beginning to move."

Eddie glanced at the order hoop he'd hooked over the semaphore levers. The dispatcher hadn't said that exactly right. He seemed to have forgotten that if Bricks didn't come up for air at once he would stop the *Silver Arrow*. Eddie stared into the west. There was no sign of him, no shimmer of headlight or warning block signal.

You could feel the *Silver Arrow's* long lunge across the solemn flats in the moonlight. Brick must be in the kind of trouble that prevented his telephoning from Mesquite, or from any of the blind sidings between, and he hadn't been able to bring his engine back. Bricks played for keeps. He wouldn't touch the *Arrow's* schedule if he could help it.

When a train was hung up out there in the dark, with no word of her, you'd imagine the worst had happened.

The strident buzzer snarled and a red block flared. Eddie held the head set close to his ear, waiting for a sign of Bricks and set for a quick maneuver if the light engine showed at the last minute, while the *Silver Arrow* streaked up over the rim of the world.

He said, "Number 43 is coming at Gravity," but got no reply. The dispatcher was "down the hall" for a moment.

The second buzzer yelled that the *Arrow* was coming fast. The angry sound would stampede you into doing the wrong things if you'd let it. Eddie choked it off. This was going to make some very important people unhappy. He turned on his electric hand lantern and went out on the platform.

A locomotive headlight probed the empty miles. It ran along the line of lifeless freight cars on the passing track. It sprayed the station with crawling light. The boomer stood beside the main track and waved his lantern slowly back and forth. Not an abrupt washout that might cause the engineer to dynamite the brakes. Just a precautionary signal that he wasn't going to get the board, so he could choke her down and make an easy stop without over-running the station.

You could tell by the two whistle blasts in answer that the hoghead was furious. It was incredible that anyone would check the *Arrow's* flight at this dead end of creation.

The staccato crack of the stack died. The sullen rumble of running gear, caught in the grip of brake shoes, rolled across the infinite silence. The line of wheels trickled fire as the streamliner checked her long surge across the continent and came to a smooth stop before the remote, sun-warped, train-order depot.

She gleamed and glowed in the night. Her drawing rooms and compartments were luxurious, while her dining car sparkled like a jeweler's

FREE BOOKLET and Job-Getting Secrets

Let this Conservationist show the way to BECOME a

GAME WARDEN, FOREST RANGER, GOVERNMENT HUNTER...

OR SECURE EMPLOYMENT WITH A PRIVATE FUR, FISH OR FORESTRY COMPANY!

Meet Jim Allison, one of our personal counselors, who'll work hard for you if you're *seriously* interested in career conservation. Jim's a well-known outdoor writer. He lives on a Colorado ranch, spends his time writing various wildlife departments . . . helping men like yourself locate rewarding wildlife opportunities. If you live only for those glorious days afield; if you *believe* in conservation; then why not use your spare-time to prepare NOW, at home, for a challenging outdoor job? It's easy, fun, enjoyable as reading your favorite sports magazines. Opportunities have never been greater – almost *regardless* of your age or education. We've helped many others. Now, let Jim Allison and Home Study Training show *you* the way, too!

Join these "Lifetime Friends" of Jim Allison

"I have secured a job as a Foreman with the Conservation Dept. I am assigned to the Game Division – Thanks for everything." Britten Graham, Mich.

"Thanks for assistance in attaining a better position with the Game Commission... was given a promotion, a raise, and supervision of 5 men." C. G., Neb.

Game Warden says: "I have never read or seen anything that gives a man such a wonderful background on job opportunities in this field... should prove of great value to anyone wanting (an outdoor job)." J. F. C., Game Warden, Minn.

Jim Allison doesn't hold out he is connected with the Civil Service... nor that he has any "pull"... so he is especially proud of many of his students who have won good paying outdoor jobs. While others didn't make the grade–men such as these secured excellent, well paying positions of respect... On Their Own Merit!

What other Career offers so many of the really Important things in Life?

HUNTING AND FARMING EXPERIENCE. Hunting, farming, military service, common skills, as well as specialized schooling–all help to qualify for most outdoor jobs. Positions for men age 17 to age 45, most states.

HEALTHFUL WORK. The sense of well-being you enjoy on vacations and outings may be yours *all* the *time*. Say goodbye to "city tensions" and a humdrum job. Live *better, longer* . . . raise your family in health and happiness.

GOOD PAY, SECURITY. Start at up to $3000 yearly, enjoy fair play, regular raises. Work toward a $6000 to $10,000 position. Benefit from low cost housing, retirement income, many other advantages!

PRESTIGE. Command the respect of others! Your uniform symbolizes the vigilance needed to conserve America's precious natural resources!

HELP FILL THE NEED FOR Qualified Career Conservationist!

Make the "great outdoors" your business! With states spending more conservation funds than ever you can imagine the opportunities available! Our organization (which is *not* connected with Federal or State Civil Service, or politically controlled in any way) is dedicated to showing other conservation minded men how they, too, may prepare for and locate these careers.

GAME WARDEN. You'll protect wildlife, apprehend law breakers . . . supervise refuges, feeding stations, make game counts, etc. Start at up to $3410 a year. Prepare NOW.

FORESTRY. Work amid towering timber, crystal clear mountain streams. Protect trees against fire, insects, diseases . . . supervise patrols. Beginners often earn $300 per month. Prepare now.

GOVT. HUNTER. Hunt, trap and get paid for it! Control Mt. Lions, coyotes, bobcats, weasels, etc. Protect game, livestock. Start at up to $310 mo. Many states pay extra bounties up to $60 per predator. Here, it's hunting "know how" that counts!

HATCHERY WORK. You'll artificially propogate game fish... stock lakes, streams . . . keep growth records, etc. Start at up to $300 per month, earn about $700 as foreman. Prepare now.

PRIVATE FISHERIES, GAME FARMS. Qualified employees are urgently needed at private game farms, preserves, trout pools, etc. Above average salaries. Prepare now.

Both FREE

SELECT-A-JOB CHART

Colorful and revealing success booklet. Explains all job-getting facts plus how to get free "Select a Job Chart." Lets you match your background, education, interests, etc. against many fascinating outdoor job opportunities.

FREE INFORMATION MAIL TODAY!

©1957

AIR MAIL THIS COUPON NOW!

FORESTRY & WILDLIFE COURSE, Dept. C-42
1038 S. La Brea, Los Angeles 19, Calif.

Rush me FREE "Job Opportunity" booklet & FREE "Select-A-Job Chart" details, without obligation. (No salesman will call.)

NAME_____

ADDRESS_____

CITY_____ ZONE__ STATE____

show window. Yes, she was pretty.

Eddie suddenly remembered, with an added foreboding, that he had half-overheard on the wire that a party of foreign celebrities was riding the *Arrow* tonight. This would resound and reverberate.

THE LONE Mallet had chuckled a deep laugh as Bricks let her out down the main track, pleased that she was rid of the tonnage that had been dragging at her hind drawbar.

Bricks joggled on the seatbox like an amiable mold of jelly. Mercury, Dry Wells, and Toby, all vacant blind sidings, swam into the flare of his headlight and soon dropped behind. He slowed, coming up to Mesquite, a sprawl of abandoned old buildings with a water tank.

He headed into the westbound passing track and rolled to the farther end. There he spotted his tender at the spout. The fireman clambered down and went back to fill the tank.

Bricks ambled across to the deserted station to call the dispatcher. The telephone was in a box on the outside wall. He lifted the receiver and said, "Hello! hello!" and listened intently. The silence on the wire was unbroken. He twisted the crank and yelled into the transmitter, but got no response. The phone was dead. He gave it a resentful look and went back to his engine.

A headlight floated down the branch line that angled off into a distant valley. A long train of dripping reefers hauled in out of the solitude. She headed into the westbound pass and pulled behind the 4727.

Bricks hadn't been warned of a train coming off the branch, and he smelled trouble. That Extra 3444 West, coming up behind him had, he knew, a meet with Number 622 here, and it likely meant that the 3444 intended to get in the clear and let the *Arrow* by. If that were so, then the train of perishables would have to back out on the branch again and hang there till they cleared a siding for her.

She crawled down the pass till her engine was within six car-lengths of the 4727. At that point her emergency air exploded and her brakes went on with a wham.

Bricks figured, from the delirious tossing of lanterns down at the rear the ground. It was. A young brakeman, in too much of a hurry, had thrown the switch under the caboose before it crossed the points. The hind trucks tried to go in two different directions at once and ended by slewing around till the lift wheels dropped over the edge of a culvert.

Until the big hook came and put the caboose together again, the perishables wouldn't be able to back out on the branch to clear the pass for the 3444. The conductor stamped across to the telephone. He twisted it, yelled at it, and got no answer.

Number 622, a hundred cars of dead freight, came in from the west and crawled into the eastbound pass on the other side of the main track. The only empty siding now remaining was the old house track, which wouldn't hold more than twenty cars.

Bricks observed with growing concern that the block hadn't cleared behind the 622. Another train was coming out of the west. He chewed his cigar and speculated on who she was and what rights she had. He didn't have anything on her. There were more unexpected trains showing up here—just where they would do the most harm.

The second eastward proved to be a work train that had been unloading ballast near Slate. She had finished the job, and put a flag on the 622, and was headed for home with a string of empty gondolas. She took to the house track. The siding would barely hold her, and the hogger was slow getting into the clear.

Then the 3444 came in cautiously against the work-train's block. The engineer choked her down at the east end of the yard. He was supposed to hole up here and let the *Arrow* by, but there was no hole. He let his train drift and tried to figure out what was going on in the choked Mesquite yard.

PERCY GRANGE was on the 3444 that night. Percy was a temperamental old head, full of moods and resentments. The dispatcher had put him on a siding twice—for a meet at Kiefer and again at Clay Pots. Percy thought he should have held the main track at both places, and to show his hostility he took his time coming out of the hole. When the DS handed him up a message at Retreat, asking what was delaying him, Percy flared. He wasn't going to run the drivers off his locomotive when the dispatcher kept stabbing him.

He came fuming up to Mesquite. And when he saw that the two passing tracks were already occupied, he raved. He'd have to make a speedy run to the next siding to clear the *Arrow* without slowing her down. That dispatcher was too damn smart. Rawhide you right into a jackpot!

In his exasperation, the old runner failed to note the warning signals that the work-train hadn't cleared the main iron. Her engine was inching along on the other side of the depot, out of sight. Percy was intent upon discovering where the other fellows had gone wrong He let her drift and stared about—in the wrong direction.

The pilot of the 3444 nosed into an empty gondola that was crossing the house-track switch. The gon rode the pilot, disengaging her forward coupling. She twisted and tipped, slid off the pilot, and turned over across the main track.

Percy set the air, blew out a flag, and lit out for the telephone. He twisted the crank, yelled and swore.

Train and engine crews straggled in and assembled on the station platform. They wrangled. Now and then one of them would try the phone, hoping to get into communication with the dispatcher so he could untangle them.

The *Silver Arrow* was now due. She'd come down against the block and a flagman and find she couldn't go anywhere from here. That prospect gave them all the jitters.

Elmer Bobbin, the hogger on Number 622, sniffed cigar smoke. "That you, Bricks?" he asked. "You on that light engine?"

"Yeah," Bricks nodded. "I brought her down to give her a drink. I must

get back to Gravity to let the *Arrow* out."

"You ain't going nowhere," Elmer said irritably. "The branch is blocked by a derailed crummy and the main line is fouled by an upside-down gon. With the dispatcher's telephone out, this road has come to a standstill."

"You can pull through the east pass, Elmer," said Bricks, "and the big hook can use it as the main line till they get this mess cleaned up."

He looked at the other engineer hopefully.

"Yeah, but I can't go against the *Arrow*," Elmer snorted.

Bricks clouded the moonlight with cigar smoke. "I got rights over the *Arrow* back to Gravity," he said. "You can take your train in on my rights and I can back through the pass and follow you in. That'll let the *Arrow* roll on in."

Elmer looked at him sharply. "No light engine has rights over the *Arrow*. They never give you anything on her but hell if you don't clear her by ten minutes. Lemme see the order that'll take you in."

Bricks puffed gently once. "I ain't got a train order on it," he said placidly. "The operator is flaggin' me back."

Elmer shook his head, quick and decisive. "I'm not going against the *Arrow* on jawbone."

A PAIR of lanterns dropped from the side of the *Silver Arrow*. One went back to flag, the other headed resolutely toward the station.

Eddie Sand whistled softly. Some very unhappy brass collars would be on his neck, no matter what he said or did. He took a last long look down the main track, searching for Bricks. There wasn't a trace.

He went back to his chair and harnessed himself to the dispatcher's wire. He said quietly into the transmitter, "That light engine hasn't shown up yet." He paused to let it register. Then he added, "Number 43 arrived at 9:26."

"Whadda you mean—arrived?" the dispatcher flung back.

"Arrived," Eddie repeated. "She's standing here now."

"Well, what happened?"

"The 4727's holding her up. You told me to flag her back from Mesquite against everything except the 3444."

"I told you—what?" The dispatcher's voice went out of control.

Making a move on jawbone was always chancy. If it didn't turn out right, anybody involved could step back and say he hadn't said it. Or he didn't remember it that way.

Eddie went over it again. "We agreed to flag the light engine back," he said slowly, "because you didn't have time to issue her the order, and you wanted her train out of here ahead of the fleet."

The dispatcher protested: "You got me wrong. I wouldn't have put out anything against the *Arrow*. 'Specially tonight."

Maybe he honestly didn't remember. It had been a quick shift at a time when the DS was crowded with orders and reparts. He'd shoved the problem of sending the 4727 to Mesquite along in short seconds. Maybe he'd said it out of a dim corner of his mind and couldn't recall his words.

"Anyhow," Eddie sighed, "we're stuck."

The dispatcher rang Mesquite, holding the selector button down. "I wonder why somebody there hasn't called me. There ought to be two or three other trains at Mesquite by now." He rang again, then said dully, "I'll have to talk to the chief."

The conductor of the *Silver Arrow* was breathing down Eddie's neck. He turned in his screeching chair. To add to the grimness of the occasion, the skipper would have to be Scrap Iron Hawkins. The boomer bristled.

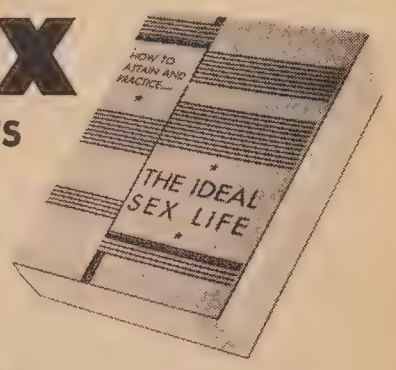
Eddie and Scrap Iron had formed a mutual and violent dislike ever since their first encounter—the one Trainmaster Stanley had been investigating. They glared at each other.

"What in hell did you stop us for?" Scrap Iron sizzled.

Eddie's explanation edged his

MARRIED HAPPINESS CAN LAST FOREVER WITH THESE

SEX FACTS for adults only



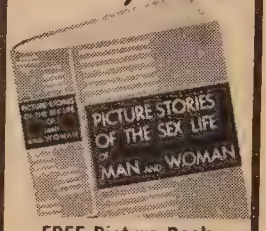
70 Simply Written Frank Chapters for All Ages!

Readers of this all-complete book (one of the largest on married sex practice) have learned so much more than they thought possible! Practically every type of married sex problem and every age is individually treated. Shows how to carry out the detailed instructions. Experience the supreme satisfaction of a longer, happier married sex life and abolish the dangers of wrong sex notions. 150,000 illuminating words help establish the necessary desired cooperation between husband and wife. One of the most up-to-date books, the latest improvements, methods, etc., that should be known. This treasure is yours now for only $1.98 (originally $6.00).

Partial Contents of "Ideal Sex Life"

- Modern methods of sex hygiene — for male and female sex organs.
- Latest sex discoveries for improving sexual practice.
- Role of husband and wife in the sex act.
- Reactions of man and woman compared.
- The perfect sex act.
- Step by step plan for wedding night and honeymoon.
- Avoiding harmful mistakes of newlyweds and older married couples.
- "Rejuvenation treatments" for increasing sex potency of man and woman.
- What causes the sexual urge.
- Sex attraction and art of courtship for woman, man.
- Modern art of mutual sex satisfaction.
- Natural birth control.
- Foreign sex practices.
- Attaining Pregnancy.
- Ideal sex techniques and methods for satisfactory sex act.
- Overcoming frigidity in women.
- Preventing dangers of children's sex life.
- Art of love for different ages and types of men and women.
- Advice for aged married people.
- Attaining the greatest satisfaction in sex life.
- 4 kinds of sexual satisfaction.
- Avoiding too much or too little sex life.
- Overcome physical hindrances for ideal sex practice.
- Avoiding dangerous sex relations.
- Degeneracy facts of sex.
- The male and female sex organs.
- Strengthening man's sex virility and sex control towards ideal mutual climax.
- Importance of caresses, embraces for ideal sex life.
- Sources of Disease.
- Sex act regarding change of life, pregnancy.
- The problem of self-satisfaction.
- Sexual Case Histories.
- How to treat abnormal cases.
- Art of choosing a mate for ideal married sex life.
- Plus many more enlightening chapters—every one in simple frank words!

YOURS free



FREE Picture Book 317 Illustrations

With order of "The Ideal Sex Life" we give you FREE "Picture Stories of the Sex Life of Man and Woman." 317 illustrations with detailed explanations of the sexual side of the human body.

- Natural birth control charts.
- Facts to know on bridal night
- Sex organs illustrated and explained.
- Women's change of life, menstruation.
- Calendar showing days of Fertility—Sterility.
- How sex system of man and woman works.
- The structure of female breasts.
- Pictures how pregnancy takes place.
- How sex vitality is produced in man, woman.
- Unusual cases, and hundreds more...

Read Both Books Without Buying

VALA PUBLISHING CO., Dept. R-799
220 Fifth Avenue, New York 1, N. Y.

Mail me "THE IDEAL SEX LIFE" in plain wrapper marked "personal," with FREE GIFT ($7.00 VALUE COMPLETE). I will pay postman $1.98 plus postage on delivery. If not satisfied within 5 days, I can return books and money will be refunded. I am over 21.

Name_____

Address_____

City_____ State_____

( ) Check here if you desire to save delivery costs by enclosing only $1.98 with coupon under same money back guarantee. **Canada, No C.O.D. Send $2.50**

temperature toward the top of the glass. "You stabbing us while a freight engine goes for a drink?" he shouted. "What's become of her?"

"Seems she got lost in the dark."

The chief dispatcher came on the wire and was curt. His questions rattled like buckshot.

"Rayburn tells me you have the *Arrow* stopped," he shot, "flagging a light engine back from Mesquite."

"That's right," said Eddie.

"Are you doing this on your own authority," the chief inquired, "or did Rayburn tell you to?"

"As I understood him, he ordered me to do it."

"Then how come you didn't also flag the 3444?" the chief bored in. "You let her in behind the 4727."

"Yeah," Eddie agreed. "That was arranged for at the time."

"Are you sure you weren't to hold the 3444 for him as well? If Bricks understood that you were, he may be tangled up with her down around Mesquite."

"He's in trouble," said the brass-pounder confidently, "and you'll hear from him."

"That desert sun," the chief fumed, "has got inside your head."

THE CHIEF would crowd you hard when he was trying to avoid a tie-up and he could think like chain lightning. He had to. Often a dozen breakdowns and mishaps on the three hundred miles of main track were spilled onto his desk and yammered at him all at the same time.

Yeah, he had all the authority needed to do his job, and in a tight spot he'd crowd you. Within a few minutes some top officials would be riding him hard to move the *Arrow*. The chief was in a hot spot. And he was crowding.

Eddie asked softly, "You want me to let the *Arrow* go?"

"Certainly! And right now."

Eddie said, "The *Arrow* sits here till we hear from Bricks."

"I'll have a trainmaster at your station right away," the chief snapped, and he began ringing Mesquite again.

This was going to be one of those nights. But the *Silver Arrow* wasn't disturbed by all the strident effort to send her on the way. She glowed aloofly, twenty sleek cars of lavish beauty.

Passengers swarmed out, protesting volubly. Then they looked at the inscrutable reaches of shadow and dusty gold, and their voices were hushed. They spread out in groups.

"Bumble Bee" Carson and his hind brakeman had come in and were jawing with Scrap Iron. Bumble Bee was the skipper of Extra 4727 West, his train tied up on the passing track awaiting the return of Bricks with their engine.

"You sure Bricks understood he was to come back against the *Arrow*?" he demanded.

Eddie framed a fine, contemptuous reply, then decided against any more altercations than were already pending. He nodded.

"You just sitting there on your behind and letting the railroad come to a complete breakdown?"

Eddie nodded again.

Bumble Bee gave a withering look and squeezed himself into an old office chair, breathing hard. He took off a shoe and shook a bit of gravel from it.

"Damn!" he said.

Kirk Meadows, the *Silver Arrow's* engineer, lounged in the doorway. Kirk was tall and straight. He had a lean, cameo face and his steel-gray eyes were quick and observing.

"Nice place you got here, Eddie."

"Yeah," Eddie agreed, "it was, up till a little while ago."

"If you think we'll be tied up here long enough," Kirk considered, "maybe I'll buy a lot and build."

Scrap Iron cut in: "I'll bet you a month's pay that Bricks is in the clear at Mesquite, waiting for us to go by."

The feeling was growing by the minute that Eddie Sand had slipped badly. Nerves tightened and men grew impatient as the hotshots stood still while time stole away into an irretrievable past. It couldn't endure for long. Something would snap.

Bricks knew how important it was to keep the *Arrow* on her schedule. Eddie couldn't imagine why they hadn't had word of him, no matter what had happened to the 4727.

Eddie glanced at the hoop draped over the semaphore levers, and one of Bricks' characteristics popped into his mind. Roaring by at night, he would always turn on the light above his head to show the op on duty that all was okay in the cab. Few hoggers bothered to perform that slight task. But Bricks didn't overlook the items that counted.

The dispatcher was moving the fleet of freight trains out of Yarbo. His voice was tight and jaded as he issued running orders. He cleared First and Second 631 and then rang Gravity.

Eddie answered. The chief came on the wire and said: "There is a party of distinguished people aboard the *Arrow* whom we are extremely anxious not to delay. It means a great deal to the Southwestern, and you are not cooperating."

"That," said Eddie, "is just one way of looking at it."

"Very well," the chief moved on. "I have started a lineman on his track motor to Mesquite to check the telephone there and report what is going on. I caught the trainmaster at October and he will be at Gravity shortly." He paused, and bore down. "When he arrives, he will take charge."

Eddie eyed the transmitter. "Yeah," he said.

"You understand," the chief dug in, "that there will be a thorough investigation."

"Yeah, I expect there will."

THE INDISTINCT mumble of voices drifted in the moonlight outside and the sound of well-bred laughter. Passengers swarmed along the line of Pullmans and wandered away, exploring.

Trainmaster Santley came down the desert road in his Ford with a cloud of dust that obscured the moon. He wheeled in beside the station on sliding tires.

"Okay, Eddie," he said ominously, "let the *Arrow* go."

The boomer gave him a cagey eye.

"I'll let the *Arrow* go when Bricks shows up, but not till he does."

Stanley flushed. He made a sharp gesture and stepped to the table. "I'll take charge here. Get out of that chair."

It was a tense moment.

"If you want to get rough," Eddie said flatly, "start in any time."

"Heave him out," Scrap Iron urged, "and let me help you!"

Eddie stood up. He relaxed, ready to fall into the wrestler's crouch that his old pal Walley Sterling had taught him. The glint of red in the boomer's hair showed like a caution signal.

The trainmaster paused. "I've got just one order," he said harshly, "That is to clear the *Arrow* from here at once." He glanced at the faces in the dim room. "You men will witness that I've given Eddie one more chance before I do it myself."

He moved closer.

"The only way to clear a train," Eddie said, "is by the book. A trainmaster knows the rules, but I'll remind you of this one." He pointed a finger. "It says that nobody but the op on duty handles the orders and the train-order signal. The book bears down on that one."

"You're always reading a book," Stanley sneered.

He reached for Eddie. He had a lot of muscle and was light on his feet. His hand darted out and closed, but Eddie wasn't there. The boomer slid along the table like a shadow and out into the room. Scrap Iron yelped and crowded in.

Then the dusky room grew quiet, except for some hard breathing and the sleepy chatter of telegraph instruments. Stanley blinked and set himself for a rush.

"That rule," Eddie said quietly, "goes so far as to say that the op coming on duty, relieving another op, must not handle the orders or the signal until a transfer is made and signed by both. They're particular about clearing trains here on the Southwestern."

Somebody broke into a sharp laugh, and Stanley exploded. He came in swinging, and then a vise took hold of him. He froze and twisted and his feet left the floor. Eddie eased the trainmaster's fall. You slam a man down hard who didn't know how to take it and you'd break some bones. The boomer made sure he wasn't hurt.

Stanley lay in the shadows, dazed and fighting for breath. He'd never before encountered the half-Nelson and the crotch hold, and it left him bewildered.

Voices outside drifted in the sudden quiet. A muffled colloquy began by the open window. A distinguished-looking young man who appeared to be British came to the doorway, and a woman stood close behind him.

"I say," he asked cheerfully, "can anyone tell us where we are, and something about this extraordinary desert country?"

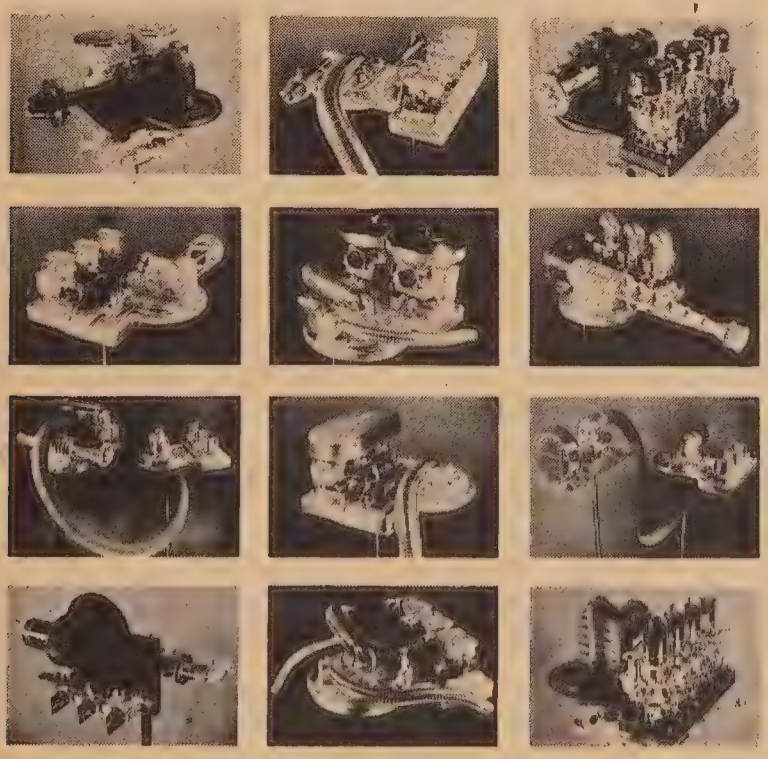
Eddie went back to the telegraph table. "I can tell you," he offered, "that the story of our wasteland is

Automotive UNIVERSAL Industrial
OBERHAUSEN
Marine SUPERCHARGERS Trucks

SUPERCHARGERS

ELECTRIC • ENGINE • EXHAUST • TWO STROKE • PULSE-JET • SOLID PROPELLENT

336 *COMBINATIONS TO CHOOSE FROM*



FEATURES:

- ADAPTS TO ANY AND ALL CARS
- SIMPLIFIED INSTALLATION
- LOW SILHOUETTES FOR LOW HOODS
- USE YOUR STOCK CARBURETOR
- CARBURETOR NOT PRESSURIZED
- ASSEMBLED OR IN KITS
- COMPRESSOR BYPASS STANDARD
- OPERATE ONLY WHEN NEEDED
- DASH REGULATION OPTIONAL
- TRANSFERABLE, CAR TO CAR
- QUICK CHANGE MANIFOLD
- QUICK CHANGE COMP. HEAD

TYPICAL INSTALLATION

OBERHAUSEN ENGINEERING CORP.
2777 ASHFORD RD., N.E., ATLANTA 19, GEORGIA

☐ $1.00 ENCL. RUSH 28 PAGE DELUXE FULL COLOR CATALOG

☐ $5.00 ENCL. RUSH 150 PAGE INSTALLATION MANUAL PLUS DELUXE CATALOG

REFUNDED ON FIRST ORDER

CAR MAKE_____ YEAR_____ NO. CYL._____

NAME _____

ADDRESS _____

CITY_____ ZONE____ STATE_____

65% BOOST; 107 HP INCREASE
ON STOCK 283 cu. in. CHEVY, USING AN INEXPENSIVE MODEL

brutal. I've just been reading up on it."

"Decent of you," the stranger murmured. "My name's Beaton-Conway, and I'd like you to meet my wife. We're on a bit of a honeymoon."

The bride was dark and shy and quite charming. A dozen or so men and women gathered about them.

"Friends of ours," Beaton-Conway included them all in the introduction. "Now tell us the most brutal part."

Facing an unexpected audience stiffened Eddie's tongue. It stumbled a little at first as he stood on the step, recalling the history and legends that were fresh in his mind. He caught the scent of exquisite perfumes as he told what he knew of the bygone days. His enthusiasm mounted as he recreated the rogues and the fancy women.

Passengers loitering through the moonlight came in groups, drawn by the magnet of a crowd. Beaton-Conway was holding his bride's hand and they both stared up at the boomer, enthralled. The last of the parties straying in the moonlight joined the throng. There were four hundred passengers aboard the *Arrow* and nearly all of them were present.

DIM MEMORIES moved in swiftly out of the moonlight. Eddie remembered that time when he'd worked here before, a wide-eyed kid brass pounder wandering through a world of enchantment, and the old prospectors who used to plod in out of the mirage with their burros, to fill their tough hides and their canteens at the water barrels.

The smoke and fine smells of their campfires drifted across his face as he recalled those gaudy nights and the old desert rats who had stuffed the breathless kid with tales of phantom gold and legends.

"My word!" said Beaton-Conway. "This has been terribly decent of you," he said, "and I'm going to write your people and tell them so." He shook hands. "Don't be surprised if I show up later, all outfitted for a try at those black nuggets."

A man pushed his way through the thinning crowd. "Brother," he said, "you've given me the first break I've had out of this long and lousy trip, all the way from New York. I'm a newspaper man, and that," he indicated Beaton-Conway, "is British royalty, on a honeymoon and a mission at the same time, but till you came into the picture they hadn't made as much copy as a hog-calling contest."

He wrote as he chattered.

"I don't know if you were telling the Prince bedtime stories," he added, "but you get the morning papers —any of 'em—and see if I don't splash the front page with the tales you told that boy."

The bigshots wouldn't complain when they learned from their newspapers that their train had been delayed by royalty. They'd brag about it, and ride the *Silver Arrow* next time.

The alert reporter was looking expectantly, his pencil poised. He glanced at the trainmaster.

"Oh, the name?" Eddie came back with a bump. "Put it down, Trainmaster Stanley."

The distant blast of a Mallet shivered up through the floor. A strong pulse beat across the shimmering flats and then the bull voice of her whistle boomed in the quiet. Her headlight flared up over the bulge of the earth.

At, length the red block splashed against the vague stars and the raucous squawk of the buzzer sawed into the stillness. Eddie choked it off.

"That," he said, "ought to be Engineer Bricks, coming up for air."

Stanley gave him a groggy stare. "I don't know what's going on around here," he said suspiciously. "What did you put my name in the paper for?"

"Look," Eddie replied, "when the brass collars read that newspaper story, with your name linked up with the Prince and then they get his letter, which they'll think is written about you, they're going to think you are a very bright boy."

The Mallet's whistle sounded at the mileboard, and they all trooped outside. Her headlight swung out of a curve and blazed down the main track.

"That's not a light engine backing up," Kirk Meadows pointed out. "It's a hundred-car freight train."

She slowed, coming up to the yard, but ran by the passing-track switch. The beat of her stack died as she came up to the house track, then began again.

"What's she heading into that short siding for?" the trainmaster asked. "The house track won't hold her."

The deep, deliberate slam of the Mallet's stack flowed across the empty reaches of shadow and dusty gold and it made your pulse throb. A black funnel of smoke lifted high against the dim sky. Passengers from the gleaming *Arrow,* knotted in groups, watched her quietly.

The engine crept through the siding and stopped at the east end with a sizzle of compressed air. Most of the train still hung out on the main.

"There've been some crazy doings around here tonight," the trainmaster said, "but this looks like the most delirious of them all." He took off headlong for the engine but stopped suddenly in his tracks.

A trainmans' lantern, down by the west switch, flashed a back-up signal. The train came apart at that point and the rear section backed off.

It appeared to maneuver without motive power, but it followed the directions of the brakeman's lantern. The string of cars stopped when he signalled again. Then when he gave the come-ahead sign, the string headed into the passing track on top of Bumble Bee's train.

"Nice job of switching—but what the hell for?" Scrap Iron snorted.

"This railroad," Bumble Bee remarked, "is sure on a wing-ding tonight. I wonder what's become of Bricks?"

THE CLUSTER of lanterns by the old Mesquite station made restless, diamond points in the moonlight. The men shifted their feet and settled solidly on spraddled legs, or hunkered down against the depot wall, prepared to enjoy the alterca-

tion between Bricks and Elmer Bobbin.

Elmer said: "You know damn well, Bricks, that we're in a bad spot and the only safe thing to do is wait it out. They'll finally send in for us."

"Yeah, but that'll tie up the railroad for too long. If you don't want to go to Gravity against the *Arrow* on my rights," Brick suggested, "let *me* take your train in."

"No, sir," Elmer retorted. "Turning my engine over to you don't relieve me of responsibility."

"You'd be safe, goin' on what I've got," Bricks edged in, his voice hard and wary.

"I drag out onto the main iron in the face of that streak of varnish. Mister," Elmer complained, "they'd cut my neck off right under the ears."

Bricks took two easy puffs. "There ain't no green op on duty at Gravity tonight. Eddie Sand's on the job."

Elmer looked at him sharply. "I thought Eddie was on his vacation."

"He's back," said Bricks, "and he hung a hoop over the semaphore levers as I was leavin', and he said he'd hold everything west, after the 3444 past him, till I got back."

"Why'n hell didn't you say so in the first place?" Elmer stormed. He took his gloves from his hind pocket and put them on. "Let's get this railroad rolling again."

THE STRING of cars rumbled down the passing track past the group of railroaders on the Gravity station platform. A brakeman, clinging to the head car, signalled a back-up with his lantern.

Stanley turned his head from side to side, trying to make up his mind where to start an investigation. A marker light made a dim spot at the hind end of the line of rolling cars. A faint halo burned around the rear end of the caboose.

Bumble Bee figured out loud that it was the hind-light of a locomotive backing up. And then all at once they realized what was happening. Number 622 had somehow got in Bricks' way and he'd had to bring her in on his flag. The train was too long to clear on the pass, so they'd had to stow part of it on the house track.

Engineer Kirk Meadows grinned at Eddie. "Old Bricks sure can think of more tricks!"

The brakeman's lantern signal slowed, then waved a stop as the head car came up to the line of cars already on the pass. The 4727 grunted to a stand inside the switch. Bricks got down from her high cab and ambled across to the station.

"Ho-kay, Eddie," he called amiably. "Light Engine 4727 is back. You can take in your flag."

"Would you mind telling me what's been going on down there at Mesquite?" Stanley inquired.

The trainmaster's well-mannered tone caused the engineer to pause.

"There was some mishaps," he beamed. "A crummy on the ground and a gondola on its back across the main track. Likely a switch or two tore up also. You'll have to put all the trains through the eastbound pass around them till you pick 'em up and make repairs."

The *Silver Arrow* blazed away across the shimmering sweep of desert. She howled exultantly as she plunged toward the horizon.

They got Number 622 put together again, and she lumbered eastward.

Stanley came back to the station.

"I'm sorry, Eddie," he offered. "The chief was tough with me. Said it was likely my job if I didn't move the *Arrow* the minute I got here. But I guess no job is good enough to pay too much for it. I'll remember that next time."

"You'll do all right," Eddie nodded.

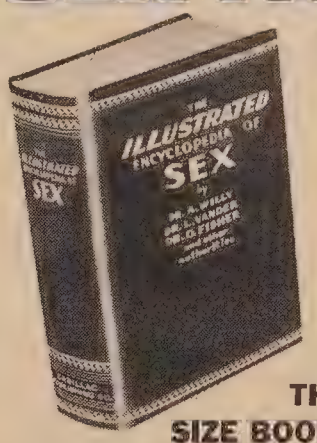
He stood listening to the trainmaster's car roar down the old desert road. It took a pretty good man to stand up and eat crow.

Shadows flowed through the haze. Eddie raised a hand in salute to the tubby figure in the high cab window, and to all the men through more than a century who had sat on the right-hand side of an engine cab.

He watched the long train roll out of the siding, watched the red marker lights fade out in the night. ●

at last a complete, modern guide to lasting mutual sexual happiness for all couples.

Illustrated SEX FACTS



BY DR. A. WILLY, DR. L. VANDER, DR. O. FISHER AND OTHER AUTHORITIES

Available in this Country for the first time

THIS GIANT SIZE BOOK CONTAINS HUNDREDS OF AUTHENTIC, ENLIGHTENING ILLUSTRATIONS *—many in life-like color.*

Now available to the public in this country, for the first time, is this big guide to modern married sex practice. Written and illustrated by the most noted physicians and medical artists on sexual enlightenment. See and read how you can acquire enduring, harmonious married love by means of hundreds of exclusive, authentic pictures (many in true-to-life color), plus detailed step-by-step instructions written frankly and simply. This complete, large book includes important NEW information and illustrations never released here before. This book is a frank, straightforward presentation of facts to satisfy mature interest in the sex functions of the human male and female. Gives the most helpful authoritative guidance on sex problems of every kind — both abnormal as well as normal. Clearly understand and see the physiology and functions of the sex organs of both male and female. Many troubled men and women have found a new, happy married sex life and new confidence in themselves by reading "The Illustrated Encyclopedia of Sex." Sells for $5.00 — but it is yours for the amazing low friend-winning price of only $2.98. This offer good for a limited time only. Mail coupon NOW!

Partial List of 61 Big Chapters. Each a "Book" in Itself.

- Techniques that bring complete gratification to the sex act for male and female
- What causes climax in women
- Blunders made by men in sex act. How to avoid them
- Technique of first sex act on bridal night
- Why woman fails to attain climax
- Husband and wife attaining mutual climax
- How male organs function in intercourse
- How female sex organs function in intercourse
- How sexual urge in woman differs from man
- Woman's perfect complete sexual satisfaction
- How to derive perfection in sexual act
- Reactions of man and woman during sexual relations compared
- The truth about sex vitamins that improve sexual powers
- Natural birth control
- New discoveries in birth control
- Woman's fertile days
- Causes of sex drive in women
- Female frigidity, its causes and cures
- Causes and cures for sexual impotence in men
- Abnormal sex organs and what can be done
- How to correct male's premature climax
- Delaying sex life's finish
- Male changes of life and its effect
- Causes and treatment of male and female sterility
- Feminine self-satisfaction
- Causes of sexual urge in men
- How sex activity affects weight of male and female
- How to use preparatory love towards greater satisfaction in sex act

Just a few of hundreds of frank, enlightening illustrated instructions!

Partial List of Illustrations with Authentic Color Pictures!

- Male Sex Organs
- Showing functions of male sex organ
- Illustrating effects on breasts after pregnancy
- Showing areas of woman's organs producing highest sensations
- Watch step-by-step growth of child in pregnancy
- Complete Color Picture Story of Woman's Sex Organs
- Pictorial Story of Woman's "SAFE" days
- Picture Story of Cause of Sterility in women
- Cross Section of the Hymen in various stages
- Cross Section Showing Cause of Women's sexual ills
- Picture Story of normal Sexuality in male
- Picture Story of Woman's Sensation Curve
- Picture Story of most important cause of impotence
- Two Inserts of Female Bodies showing how pregnancy takes place

. . . plus many more pictured instructions

SEND NO MONEY! FREE 10 DAY TRIAL COUPON

CADILLAC PUBLISHING, Dept. F-207
220 Fifth Avenue, New York 1, New York

Send me "The Illustrated Encyclopedia of Sex" in plain wrapper marked "personal." I will pay postman $2.98, plus postage on delivery (sells for $5.00). If not completely delighted within 10 days, I can return book and my money will be refunded. I am over 21.

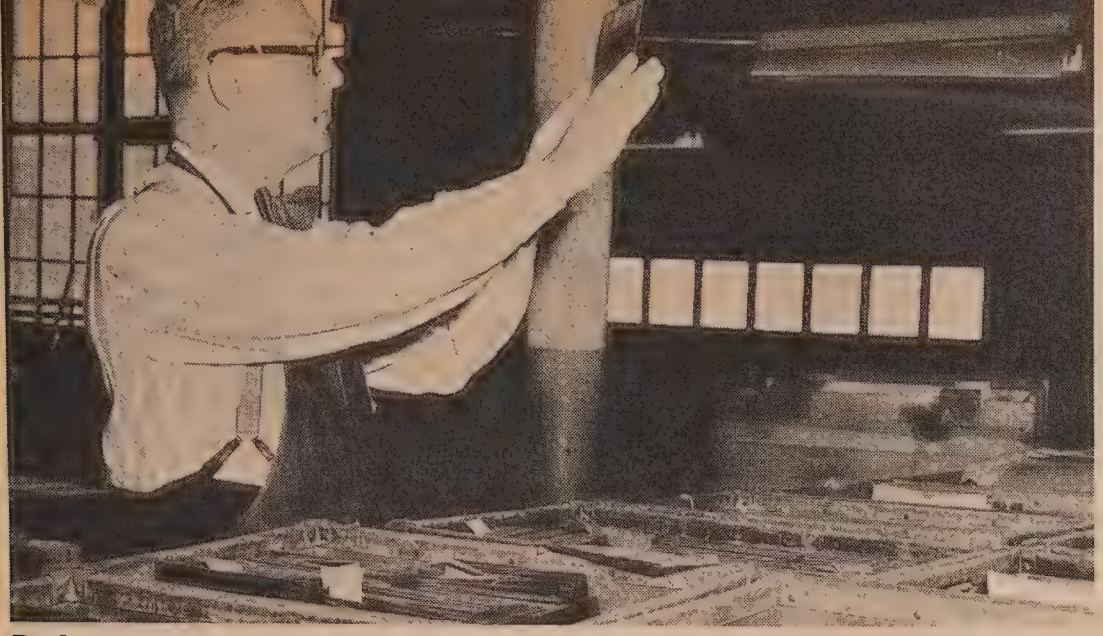
NAME _____

ADDRESS _____

CITY _____ ZONE ___ STATE _____

☐ Check here if you wish to save postage, by enclosing with coupon only $2.98. Same Money-Back Guarantee!
(CANADIAN ORDERS $3.50. NO C.O.D.'s.)

Salon in private car *Cleopatra*, built in 1889 by Pullman Palace Car Co., predecessor of Pullman-Standard, for officers and directors of the International-Great Northern RR. in Texas (now part of Missouri Pacific). Note the beveled-edge French mirrors, costly upholstery fabrics, and highly polished walnut panels of upper berths. (One of the rare photographs from long-missing Pullman files that will appear in a new book by Lucius Beebe, *Mansions on Rails*.)



Beebe examines glass negatives of old unpublished photos in Pullman archives.

Mansions on Rails

A SIGNIFICANT find in rail history resulted from the decision of Pullman-Standard Car Manufacturing Co. last summer to close their once-vast shops at Pullman, a Chicago suburb, and distribute elements of their business at key points throughout the country.

Some of us believed there existed a complete pictorial file of Pullman cars built in the 19th Century, but its location was a mystery comparable to the lost Gunsight Mine or the kidnapping of Charlie Ross. Most persistent seeker of the missing archives was Lucius Beebe, ranking authority on private railroad cars. For years Beebe had been prayerfully beseeching generations of Pullman executives for its recovery. He wanted to do a definitive monograph on such cars.

Beebe had friends at Pullman and was also a customer, having bought his own and Charles Clegg's private car, *Virginia City*, from Pullman a few years back. He was visiting London when he learned that the long-vanished files had been found. He promptly returned to America.

The archives had turned up in the loft of an old Pullman shop. Workmen dismantling it for a new tenant discovered 49 packing-cases of collodion wet-plate negatives which had been accumulating the dust of decades since McKinley was in the White House. This almost complete picture file showed cars of every description outshopped at Pullman since the late '80's, although, unhappily, none dated from the company's earlier activities in Detroit.

At Chicago, Beebe went to work sorting three thousand 8x10 fragile glass plates and identifying them from Pullman's master record of photographs which, mercifully, was available intact. Some 350 of these proved to be interiors, exteriors, or details of private or business cars, many of them famous.

Among them were George M. Pullman's own and celebrated *Monitor*, James Ben Ali Haggin's *Salvator*, Senator William A. Clark's No. 2001 on the Northern Pacific (later the property of William Randolph Hearst), Arthur E. Stillwell's No. 100 of the Kansas City, Pittsburg & Gulf; *El Fleda* of the "Millionaire Brakeman", Johnny Bunting, Jay Gould's *Atalanta*, Bert Calton's *Cascade* on the Colorado Midland, the Vanderbilt cars *Wayfarer* and *Idle Hour*, and Collis P. Huntington's two *Oneontas*.

Prints of these precious—indeed, priceless—negatives were made for Beebe by Pullman-Standard's official photographer, Melvin Horn. The cream of them will appear in a new book, *Mansions on Rails: The Folklore of the Private Railway Car*, to be published this fall by the Howell North Press, Berkeley, Calif.

Because of the forthcoming work and many other Beebe books on rail history and lore, in most of which Clegg collaborated, it is high time that some group such as the Association of American Railroads give the two authors special recognition. Few men, if any, can match Lucius Beebe and Charles Clegg in the creative work they have done to keep alive the romance of American railroading and enshrine it on the printed page in words and pictures for future generations. ●

OPPORTUNITIES FOR EVERYBODY

PERSONAL & MISCELLANEOUS *(MB-FM9)*

FIND HIDDEN TREASURES in your own backyard . . spare time—weekends. Get Free information about sources, bargains, vital data from the jewelry industry's biggest suppliers. Write for Free Booklet! Grieger's, Dept. B-07, Pasadena 4, Cal.

BUY WHOLESALE! 100,000 Nationally Advertised Products. Appliances, Cameras, Sporting Goods, Housewares, Watches, Typewriters, Tools, Clothing, etc. Discounts to 80%, Buy-Rite, Box 258, Hawthorne 33, New Jersey.

WHY WORRY ABOUT Work? Escape Jobs Forever! Retire Securely Now. Lead Leisurely Life. Unusual New Book Shows How. Postcard Brings Details Free. Belmont, Wyckoff 86, N.J.

BUY WHOLESALE! 25,000 Nationally Advertised Products. Get Amazing Dealer Catalogs. Complete Details Free. American Wholesalers, 1841DJ Levee, Dallas 7, Texas.

THE PERFECT GIFT. Colorful Deed to square foot of land in Hawaii, $1.00. Airmailed anywhere. McConnell, Box 2119, Honolulu 13, Hawaii.

FREE "DO-IT-Yourself" Leathercraft Catalog. Tandy Leather Company, Box 791-027, Fort Worth, Texas.

ADULT BOOK AND Photo samples; special offers, 25c. D. Hurst, 5882 Hollywood Blvd., Hollywood 28, Calif.

BULLETIN OF ADULT domestic discipline. Details. Box 75662, Los Angeles 5, Calif.

BUSINESS & MONEY MAKING OPPORTUNITIES

"50 NEW HOME-Business ideas" Booklet, sample Free. Spray exotic Velvet-Suede on anything. Flockcraft-R2, Los Angeles 61.

$3.00 HOURLY POSSIBLE assembling pump lamps Spare Time. Simple, Easy. No canvassing. Write: Ougor, Caldwell 3, Arkansas.

EARN EXTRA CASH! Prepare Advertising Postcards, Langdons, Box 41107MB, Los Angeles 41, California.

FOREIGN & U.S.A. JOB LISTINGS

COPYRIGHTED REPORTS. BEST paying jobs. Travel, adventure, promotions. Construction, aviation, shipping, oilfields, laborers, clerical, trades, supervisory, factory, unusual opportunities. Skilled-unskilled. Foreign—United States. Men—women. $2.00 (Airmailed $2.25). (COD'S Accepted). Registration-Advisory service. Satisfaction guaranteed. Research Services, Meramec Building, St. Louis 5, Missouri.

JOBS—HIGH PAY: USA, So. America, The Islands. All trades. Many companies pay fare. Write Dept. 71D, National Employment Information, 1020 Broad, Newark, N.J.

LOANS BY MAIL

BORROW $50 TO $500 for any purpose. Employed men and women over 25, eligible. Confidential—no co-signers. Up to 2 years to repay—low monthly payments. Supervised by Nebraska Banking Department. Loan application sent free in plain envelope. Give occupation. American Loan Plan, City National Bank, Dept: BC-2, Omaha 2, Nebraska.

BORROW MONEY BY Mail. $100-$600. Anywhere. Air Mail Service. Postal Finance, 200 Keeline Building Dept. 663B, Omaha 2, Nebraska.

EDUCATIONAL OPPORTUNITIES

ELECTRONIC AND AERONAUTICAL Engineering Technology. Two Year Courses. Bachelor of Science Degree in three years. Northrop Institute in Southern California prepares you for highly paid positions in Aviation and Electronic Industries. Employment assistance during school and after graduation. Approved for Veterans. Write for free catalog. Northrop Aeronautical Institute, 1125 Arbor Vitae, Inglewood 1, California.

LEARN WHILE ASLEEP! Exciting details free. Sleep-Learning Research Association, Box 24-PC, Olympia, Washington.

AUTOMOBILE SUPPLIES

1959 EDITION. IT'S New! It's Different! Get world's largest auto accessory and parts catalog, save up to 50%. 308-pages, over 85,000 items for 1920 to 1959 Models including Hollywood Accessories, Custom Styling and Hi-Speed Equipment. All parts and accessories for all cars and trucks. We have that hard to get part. Jammed packed with bargains. Completely illustrated. Send 25c (refundable). J. C. Whitney, 1919-YZ Archer, Chicago 16.

OLD COINS & MONEY

WE PURCHASE INDIANHEAD pennies. Complete allcoin catalogue 25c. Magnacoins,Box 61-A, Whitestone 57, N.Y.

WE BUY ALL rare American coins. Complete catalogue 25c. Fairview, Box 1116-TS, New York City 8.

BOOKS & PERIODICALS

FREE ILLUSTRATED HYPNOTISM Catalogue. Write: Hypnotist, 8721 Sunset, Hollywood 46W, California.

WANT YOUR BOOK published? Free Booklet 56. Vantage, 120 W. 31, New York City.

STAMP COLLECTING

GIGANTIC COLLECTION FREE. Includes triangles, early United States, animals, commemoratives, British Colonies, high value pictorials, etc. Complete collection plus big illustrated magazine all free. Send 5c for postage. Gray Stamp Co., Dept. PL, Toronto, Canada.

HANDCUFFS AND LEG-IRONS

COLLECT PRISONERS' SHACKLES. Unique, exciting hobby. 25c brings list of antique, modern; foreign, domestic; police, Navy irons; illustrated article. Patterson Smith, 269-D Shepard Ave., East Orange, N.J.

MUSIC & MUSICAL INSTRUMENTS

POEMS WANTED FOR New Songs and Recording. Immediate Consideration. Send Poems. Songcrafters, Box 6145 Acklen Station, Nashville, Tenn.

INVENTIONS

INVENTIONS NEEDED IMMEDIATELY for manufacturers. For additional information write Kessler Corporation, 133, Fremont, Ohio.

SALESMEN & HELP WANTED

WILL YOU WEAR new suits and topcoats without one penny cost and agree to show them to friends? You can make up to $30.00 in a day even in spare time, without canvassing, Pioneer Tailoring Co., Congress & Throop Sts., Dept. K-1061, Chicago 7, Illinois.

EARN EXTRA MONEY Selling Advertising Book Matches. Free Sample kit furnished. Matchcorp, Dept. GH-29, Chicago 32, Illinois.

HOME SEWING OPPORTUNITY

$200. MONTHLY POSSIBLE, Sewing Babywear! No house selling. Free Information. Send name to Cuties, Warsaw 13, Indiana.

STEAM TODAY IN ALABAMA

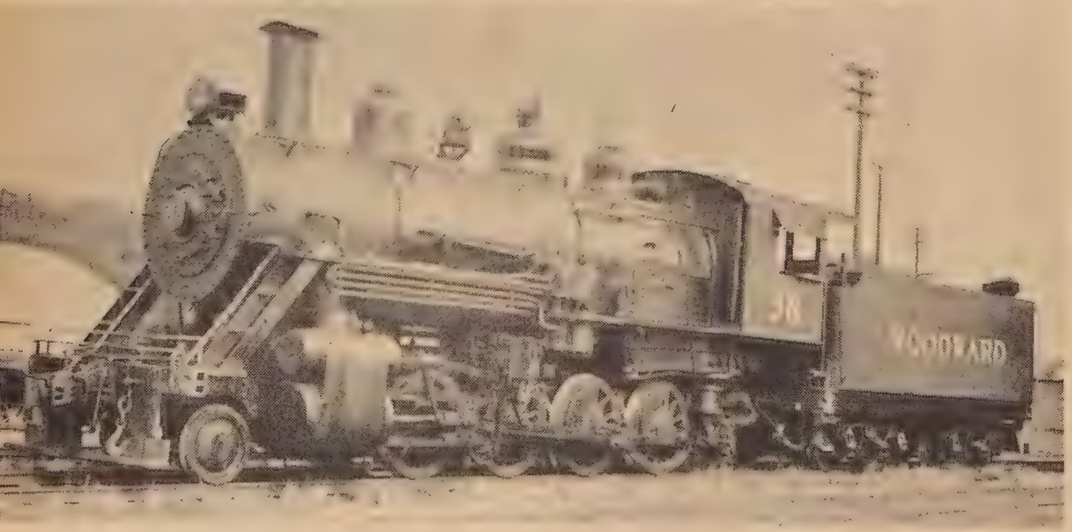
by Thomas Lawson, Jr.

Balloon stacks. Twin Seams Mining Co. No. 8 steams past No. 5, just repaired.
Six photos by the author, 2533 Montevallo Road, Birmingham, Ala.

Frisco sold its No. 3802 to Republic Steel Corporation plant at Birmingham.

DeBardeleben Coal Corp. operates er-Illinois Central 0-8-0 switcher No. 3566.

No. 18 of Woodward Iron Co., with a fresh coat of paint, poses for picture.



ALABAMA, my home state, has quite a bit to offer the railfan. It is served by 27 common-carrier railroads with 4,468 miles of line. Also two logging roads, a few coal-mining roads, and 16 other industrial roads. Here is the situation regarding steam power:

Alabama By-Products Corp. in Tarrant City has two steamers, Lima-built No. 4046 and Alco-built No. 4030, Army-type 0-6-0's built in '42 and '44 respectively, and an EMD diesel.

Alabama Marble Co., near Sylacauga, has an 0-4-OT built by Cooke in 1910. Last February, when No. 3 was due for new flues, the company decided to give her a major overhaul rather than buy a diesel.

Alabama Asphaltic Limestone Co. alternates an ex-Southern 2-8-0, No. 401, with an 0-4-0T, No. 3, in hauling limestone to the Southern Ry. connection at Margerum, a mile and a half from its plant. Alco built No. 3 in 1922. Baldwin built No. 401 in 1902.

DeBardeleben Coal Corp. at Holt likes Illinois Central stema power. Began with two ex-IC 4-6-2's, numbering them 104 and 105. Scrapped No. 104 in 1957 and bought IC Nos. 3525 and 3566, both 0-8-0's.

Gulf States Paper Co., also at Holt, uses two 0-6-0's for switching. For some peculiar reason, both have long numbers: 35X1272 (formerly L&N 2091) and 35X1660 (formerly GM&O 63).

Mobile River Saw Mill Co., located at Mt. Vernon, on the Frisco, about 40 miles north of Mobile, operates over two miles of rail to the Frisco with No. 18, a woodburning 2-6-2. Occasionally leases a Frisco diesel. No. 18, built by Baldwin in 1920, was bought from Bagdad Land & Lumber Co. of Bagdad, Fla.

Pullman-Standard Car Manufacturing Co. has dieselized all of its plants except Bessemer, the largest. Three saddle-tank steamers do the switching here. No. 2, a Baldwin 0-4-0T, has been out of service three years and is unlikely to run again. The other two are 0-6-0T's built in 1942 for the U.S. Army, No. 4 by Vulcan and No. 5 by Porter. One is used every week-day.

Twin Seams Mining Co. is Alabama's strangest rail operation. The line runs

16 miles between Holt, on the GM&O, and Kellerman, where coal mines and washer are located and where the locomotives are kept. It is powered by three Shays, all 3-truck. No. 17, built by Lima in 1916, was bought in 1947 as Cherry River Boom & Lumber Co. No. 17. Out of service since 1953.

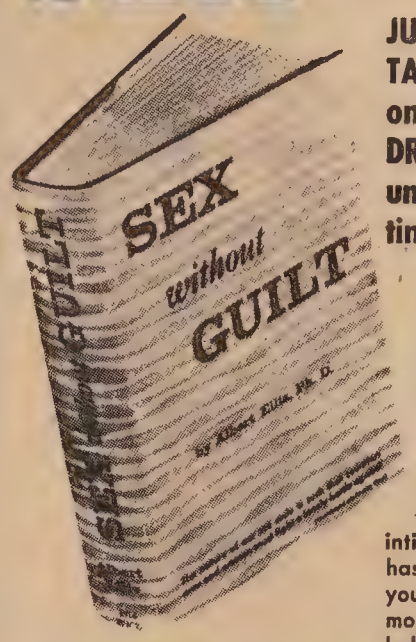
No. 8, built by Lima in 1922 for Alabama & Tombigbee RR. at Fulton, Ala. was bought by Twin Seams in 1948. She was the mining company's first regular engine from the time No. 17 was sidetracked until No. 5 arrived from Meadow River Lumber Co. of Rainelle, W. Va. Number 5, built by Lima in 1923, made her first run on Twin Seams last March 17 and has been in constant use ever since. When she is being repaired, however, No. 8 takes over.

Woodward Iron Co. of Woodward operates the state's largest rod engine, an ex-Alabama, Tennessee & Northern 2-10-0 numbered 41. Built by Baldwin, as were all six of Woodward's remaining steamers, in 1928, No. 41 was overhauled recently, but at this writing she hasn't been used yet because of a business slump. In fact, no Woodward steamer has been operated since 2-8-2 No. 31, built in 1913, had her fire killed Jan. 1, '58.

Nos. 35 and 36 are twin 2-8-0's bearing Baldwin construction numbers 55639 and 55640. Both were bought from a Chicago dealer in used locomotives. No. 38, also a 2-8-0, came to Woodward from Batson & Hatten Lumber Co. of Mississippi by way of the Birmingham Rail & Loco. Co., while No. 40, also a 2-8-2, Baldwin 1912, was bought from the Atlanta, Birmingham & Coast. Six EMD diesels currently handle all of Woodward's present needs, but it's a safe bet that a business pick-up will put the steamers back.

With so much steam left, Alabama is a great place for camera fans, but you'd better hurry. ●

SEX *without* GUILT



JUST PUBLISHED! This may be the MOST IMPORTANT BOOK since the ORIGINAL KINSEY Report on SEX HABITS OF AMERICAN MEN AND WOMEN! DR. ELLIS gives clearly expressed answers to universal problems that are of the most intimate and personal nature.

Millions of men and women suffer from sex guilt. They carry a burden of guilt for doing those sexual things which are neither harmful to themselves nor to others. In this provocative new book, Dr. Ellis offers new understanding about sex guilt and the taboos of our Western culture. He takes a bold position on sex. His purpose is to help you understand sex guilt and thereby free you from it. No phase of human sex relations is avoided. And always his talk is plain, direct, clear, born of a healthy, guilt-free attitude which has grown from the intimate research of this respected psychologist. What he has to say will make life easier and more enjoyable for you and will confound the prudes. Author of six books and monographs and over 100 scientific papers, Albert Ellis holds a Ph.D. degree from Columbia University, has taught at Rutgers and New York University, and is a Fellow of the American Psychological Association.

Chapters Fully Explaining:

- Masturbation
- Petting
- Premarital Sex Relations
- Adultery
- The Justification of Sex Without Love
- Why Americans Are So Fearful of Sex
- Adventures With Sex Censorship
- How Males Contribute to Female Frigidity
- How American Women Are Driving American Males Into Homosexuality
- Sexual Abnormality
- The Right to Sex Enjoyment
- Other Vital Chapters

BLYTHE-PENNINGTON LTD. DEPT. 3401K
19 WEST 44th ST., NEW YORK 36, N. Y.

Please send me_____copies of "Sex Without Guilt" @ 4.95 each. If not completely satisfied, I may return for full refund within 10 days.

NAME_____

ADDRESS_____

CITY_____ ZONE____ STATE_____

☐ Enclosed find payment (check, cash, money order.)
☐ Send C.O.D. I will pay Postman $____plus postal charges.

RAILROAD JEWELRY

DOZENS of readers have answered C. H. Heffelfinger's request (Oct. '58 issue) for information on where he can buy tie-clasps depicting locomotives. Readers sent us this list of dealers in railroad jewelry, many kinds:

Pennsy Family Club, c/o Pennsylvania Railroad, 6 Penn Center Plaza, Philadelphia 4, Pa. (See item in our Oct. '57 issue, page 80.)

Wayne Silversmiths, Inc., 546 S. Broadway, Yonkers 5, N. Y.

W. A. Petereorth (mfg. agent), P.O. Box 161, Louisville 12, Ky.

Custom Engravers, P.O. Box 2791, Denver 1, Colo.

Authentic Railroadiana Supply Co., 105 Walton Ct., East Peoria, Ill.

Guy E. Lockhart, 3817 Osceola St., Denver 10, Colo.

Hobby House, Inc., 800 Huron Rd., Cleveland, O.

Lindsay Products, 5645 Selmaraine Dr., Culver City, Calif., and 8277 Stewart Ave., Los Angeles 45, Calif.

H. E. Joslin, 532 Mill St., Elgin, Ill.

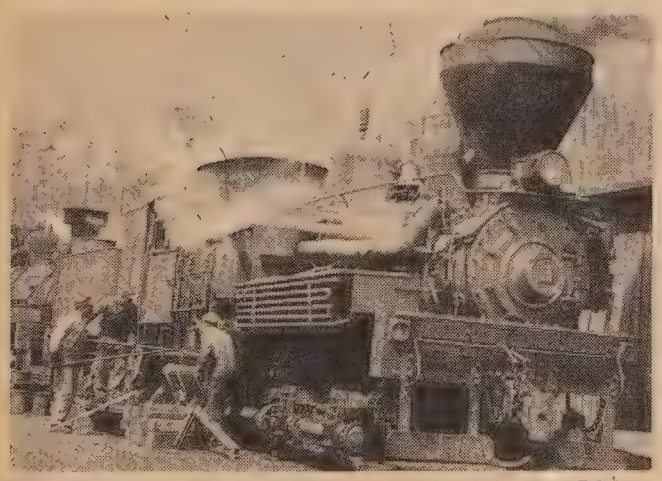
Belvas Ceramics, 639 Marion Ave., Kalamazoo, Mich. (This is a railfan and his ceramist-wife team.)

Mrs. Alva Trook, 805 S. 25th St., Lafayette, Ind. (Another man-wife team. They operate 1200 feet of track for ¾-inch scale steam locos built by men from several states and Canada, who go there three times a year for this event. List of rr. jewelry they sell, price range 79c to $4, will be sent for 4c stamped env.)

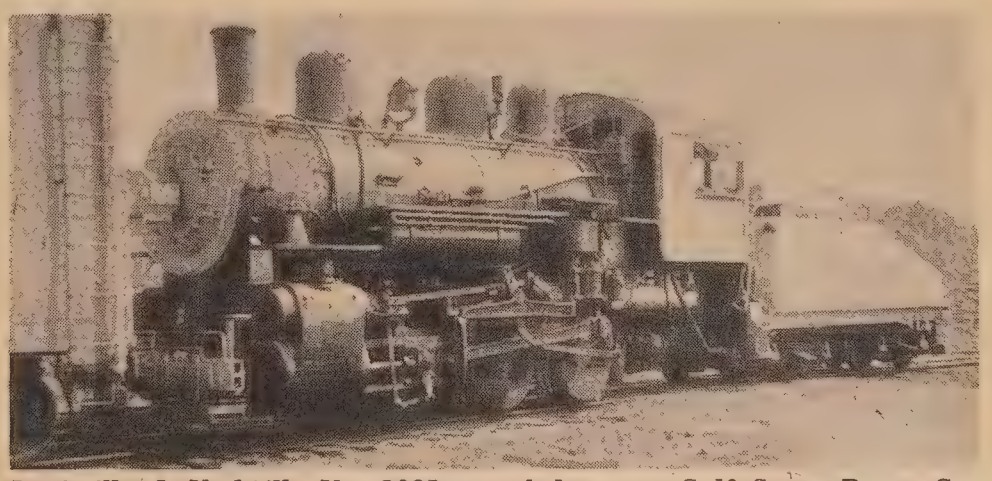
Anson, Inc., 375 5th Ave., New York City.

Pioneer Jewelry Corp., 39 W. 34th St., New York City, or men's shops everywhere that handle their line (at least 4 diff. loco designs, a sleeping car, etc.), including Pioneer Belt Co., Darby, Pa.

Models Shops, 2241 Woodward Ave., Ferndale, Mich.



Three men work on Shay at Twin Seams Mine.



Louisville & Nashville No. 2091 now belongs to Gulf States Paper Co.

Painted for C&O Railway by Howard Fogg, industrial illustrator, 2320 Balsam Ave., Boulder, Colo., who created our June and Dec. '58 cover pictures.

Chesapeake & Ohio Railway

Roster Compiled by Sy Reich

Notes and Abbreviations

Roster accurate as of July 29, 1958. Data supplied by Chief Mechanical Officer of C&O and by GM-EMD. Abbreviations: GM-EMD—Electro Motive Division, General Motors Corp.; GE—General Electric; Alco or A—American Locomotives Co.; B—Baldwin; L—Lima; H—Hamilton; W—Westinghouse.

(1) Ex Pere Marquette.

(2) Ex Pere Marquette class DEP-1 (101-102), DEP-2 (103-108), then C&O classes D-1 and D-2 respectively.

(3) Ex Pere Marquette, then sold. Not on roster now.

(4) Sold to LV in 1950 and renumbered 217-218.

(5) 5703 wrecked and scrapped 1/57. 5720-5729 sold to GM-EMD 12/55, then resold to NYC.

(6) 5908 wrecked and scrapped, 10/55.

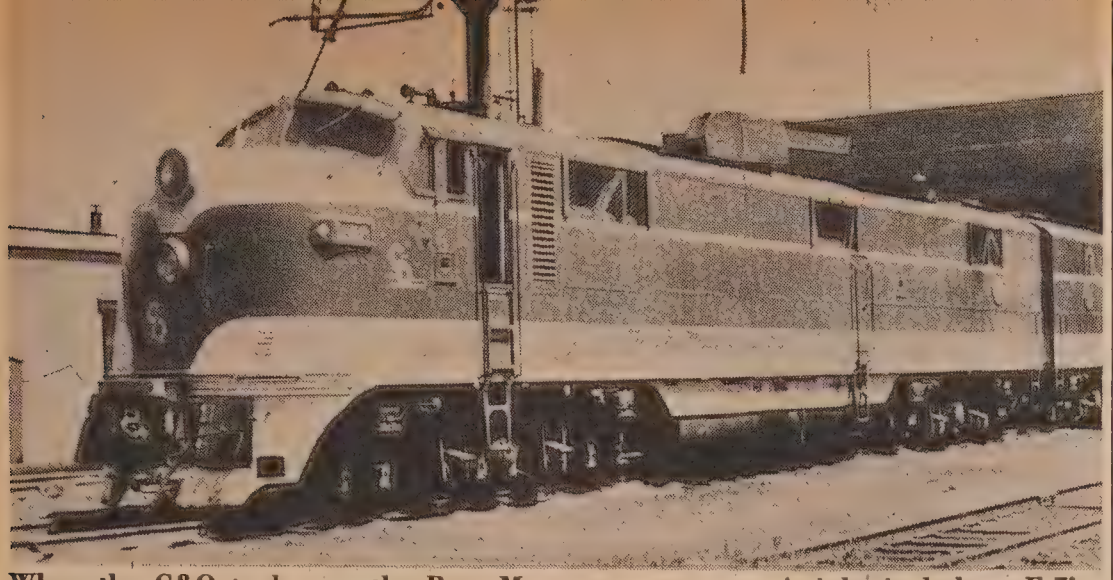
(7) 5533 sold to Pan-American Engineering Co. 1/58.

(8) Ex Pere Marquette class DES-1 and DES-1A, then C&O D-10 and D-11. Were supposed to be renumbered 1800 and 1805.

(9) Ex Pere Marquette class DES-2, numbers 51-54 (5275-5278), DES-3 numbers 55-64 (5280-5289) and 1850-1856. Then C&O class D-13, numbers 1815-1818, and D-14, numbers 1820-1829 respectively. Renumbering of these locomotives was begun in 1955 and is still in process. Some units still have old numbers. ●

STEAM LOCOMOTIVES

Class	Number Stored	Rd. No. Series	Cyls.	Dri.	BP	Weight on Dri.	Trac. Eff.	Builder	Date	Notes
0-8-0 (Switcher) Type										
C-16	2	175-254 380-394	25x28	52	200	240,000	57,200	A,L	1930-'42-'43	
2-6-6-2 (Mallet Articulated) Type										
H-4	11	1326-1473	22&35x32	56¼	200	367,000	74,200	Alco	1912-'18	
H-6	15	1475-1519	22&35x32	56¼	210	376,500	77,900	Alco	1920-'23	
2-6-6-6 (Mallet Articulated) Type										
H-8	8	1600-1644	22½&22½x33	67	260	507,900	110,200	Lima	1941-'44	
2-8-0 (Consolidation) Type										
G-7	1	790-1001	23½x28	56	185	176,150	43,400	Alco	1903-'06	
G-9	2	1010-1059	22x28	56	200	178,400	41,150	Alco	1909	
2-8-2 (Mikado) Type										
K-2	1	1160-1209	28x30	63	200	268,000	63,450	Alco	1924	
2-8-4 (Berkshire) Type										
K-4	18	2700-2789	26x34	69	245	293,100	69,350	A,L	1943-'47	
N-1	3	2650-2661	26x34	70	245	277,600	68,400	Lima	1941	1
N-2	10	2670-2681	26x34	70	245	278,200	68,400	Lima	1944	1
4-8-4 (Northern) Type										
J-3	1	600-614	27½x30	74	255	282,400	66,450	Lima	1948	



When the C&O took over the Pere Marquette years ago it inherited these E-7's.

DIESEL-ELECTRIC LOCOMOTIVES

Class	Road Nos.	HP	Builder	Bld. Model	Whl. Arngt.	Tr. Ef.	Weight	Date	Notes
BL-2	80-85	1500	GM-EMD	BL-2	B-B	56,200	224,800	1948	1
BL-2	1840-1847	1500	GM-EMD	BL-2	B-B	57,475	229,900	1948-'49	1
D-12	1810-1812	600	GE	70 ton	B-B	42,500	140,000	1946	3
E-7	95-98	2000	GM-EMD	E-7A	AIA-AIA	54,400	322,800	1948	1
E-7	101-108	2000	GM-EMD	E-7A	AIA-AIA	54,400	317,700	1946-'47	2
44 ton	1	380	GE	44 ton	B-B	22,000	88,000	1946	
MRSA-15	5500-5501	1500	Alco-GE	RS-2	B-B	60,990	243,960	1950	4
MRSA-16	5600-5601	1600	Alco-GE	RS-3	B-B	64,200	256,800	1955	
MRSA-18	6700-6709	1800	Alco	RSD-12	C-C	90,000	359,950	1956	
MRSA-24	6800-6811	2400	Alco	RSD-15	C-C	97,375	389,500	1956	
MRSE-15	5700-5797	1500	GM-EMD	GP-7	B-B	64,300	257,325	1950-'52	5
MRSE-15	5800-5900	1500	GM-EMD	GP-7	B-B	63,830	255,320	1952-'53	
MRSE-17	5901-6263	1750	GM-EMD	GP-9A	B-B	63,925	255,700	1954-'57	6
MSA-10	5000-5004	1000	Alco-GE	S2	B-B	58,625	234,500	1949	
MSA-10	5005-5015	1000	Alco-GE	S2	B-B	60,425	241,700	1949	
MSE-10	5060-5065	1000	GM-EMD	NW-2	B-B	61,650	246,600	1949	
MSE-12	5236-5239	1200	GM-EMD	SW-7	B-B	61,625	246,500	1950	
MSE-12	5262-5265	1200	GM-EMD	SW-9	B-B	61,625	246,500	1951	
MTA-16	5570-5595	1600	Alco-GE	RSD-5	C-C	90,500	362,000	1952	
MTB-16	5533-5569	1600	BLHW	AS-616	C-C	90,480	361,930	1950-'52	7
MTB-16	5528-5529	1600	BLHW	AS-616	C-C	89,150	356,600	1953	
MTE-24	6600A-6601A 6600B-6601B	2400	GM-EMD	TR-4	B-BxB-B	123,550	494,200	1950	
PE-225	4000-4030	2250	GM-EMD	E-8A	AIA-AIA	56,285	334,100	1951-'53	
RFE-15-A	7000-7093	1500	GM-EMD	F-7A	B-B	61,500	246,000	1950-'52	
RFE-15-B	7500-7546	1500	GM-EMD	F-7B	B-B	61,500	246,000	1950-'52	
RFPE-15-A	8000-8015	1500	GM-EMD	FP-7	B-B	63,375	253,500	1952	
RFPE-15-B	8500-8506	1500	GM-EMD	F7B	B-B	61,275	245,100	1952	
RSA-10	5114-5115	1000	Alco-GE	RS-1	B-B	61,775	247,100	1953	
RSB-15	5530-5532	1500	BW	DRS 6-6-1500	C-C	81,625	326,500	1949	
SA-10	5016-5057	1000	Alco-GE	S2	B-B	60,425	241,700	1949	
SA-10	5100-5113	1000	Alco-GE	S4	B-B	61,425	245,700	1953	
SE-6	10-11	600	GM-EMD	SW-1	B-B	49,760	199,050	1939,'42	8
SE-10	5066-5079	1000	GM-EMD	NW-2	B-B	61,650	246,600	1949	
SE-10	5200-5213	1000	GM-EMD	NW-2	B-B	61,350	245,400	1949	
SE-10	5275-5278	1000	GM-EMD	NW-2	B-B	61,400	245,600	1942-'43	9
SE-10	5280-5289	1000	GM-EMD	NW-2	B-B	61,825	247,300	1945-'46	9
SE-10	5290-5296	1000	GM-EMD	NW-2	B-B	61,900	247,600	1948	9
SE-10	5297-5298	1000	GM-EMD	NW-2	B-B	61,500	245,970	1948	10
SE-12	5080-5093	1200	GM-EMD	SW-9	B-B	61,580	246,333	1952-'53	
SE-12	5214-5235	1200	GM-EMD	SW-7	B-B	61,600	246,400	1950	
SE-12	5240-5261	1200	GM-EMD	SW-9	B-B	61,600	246,400	1951	
SE-30	6500A-6501A 6500B-6501B 6500C-6501C	3000	GM-EMD	TR-3	B-BxB-BxB-B	188,400	753,600	1949	

Two photos by Sy Reich, 92 St. Marks Place, New York City

No. 5285, one of old Pere Marquette yard switchers renumbered in C&O sequence.

MEN PAST 40

Afflicted With Getting Up Nights, Pains in Back, Hips, Legs, Nervousness, Tiredness.

If you are a victim of the above symptoms, the trouble may be due to Glandular Dysfunction. A constitutional Disease for which it is futile for sufferers to try to treat themselves at home. Medicines that give temporary relief will not remove the cause of your trouble.

To men of middle age or past this type of dysfunction occurs frequently. It is accompanied by loss of physical vigor, graying of hair, forgetfulness and often increase in weight. Neglect of such dysfunction causes men to grow old before their time—premature senility and possibly incurable conditions.

Most men, if treatment is taken before malignancy has developed, can be successfully NON-SURGICALLY treated for Glandular Dysfunction. If the condition is aggravated by lack of treatment, surgery may be the only chance.

NON-SURGICAL TREATMENTS

The NON-SURGICAL treatments afforded at the Excelsior Medical Clinic are the result of 20 years research by scientific Technologists and Doctors.

The War brought many new techniques and drugs. These added to the research already accomplished has produced a new type of treatment that is proving of great benefit to man as he advances in years.

The Excelsior Medical Clinic is devoted particularly to the treatment of diseases of men of advancing years. Men from all walks of life and from over 1,000 cities and towns have been successfully treated. They found soothing and comforting relief and new health in life.

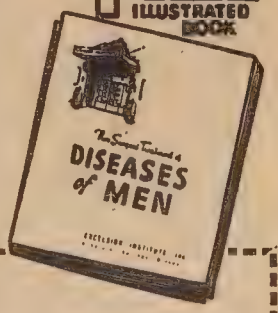
EXAMINATION AT LOW COST

On your arrival here, Our Doctors who are experienced specialists, make a complete examination. Your condition is frankly explained to you with the cost of treatment you need. You then decide if you will take the treatments needed. Treatments are so mild that hospitalization is not necessary—a considerable saving in expense.

RECTAL COLON
Are often associated with Glandular Dysfunction. We can treat these for you at the same time.

Write Today for Our FREE ILLUSTRATED BOOK

The Excelsior Medical Clinic has published a New FREE Book that deals with diseases peculiar to men. It could prove of utmost importance to your future life. Write today. No obligation.



EXCELSIOR
MEDICAL CLINIC
Dept. B1051
EXCELSIOR SPRINGS, MO.
Gentlemen. Kindly send at once your New FREE BOOK. I am _____ years old

NAME _____

ADDRESS _____

TOWN _____

STATE _____

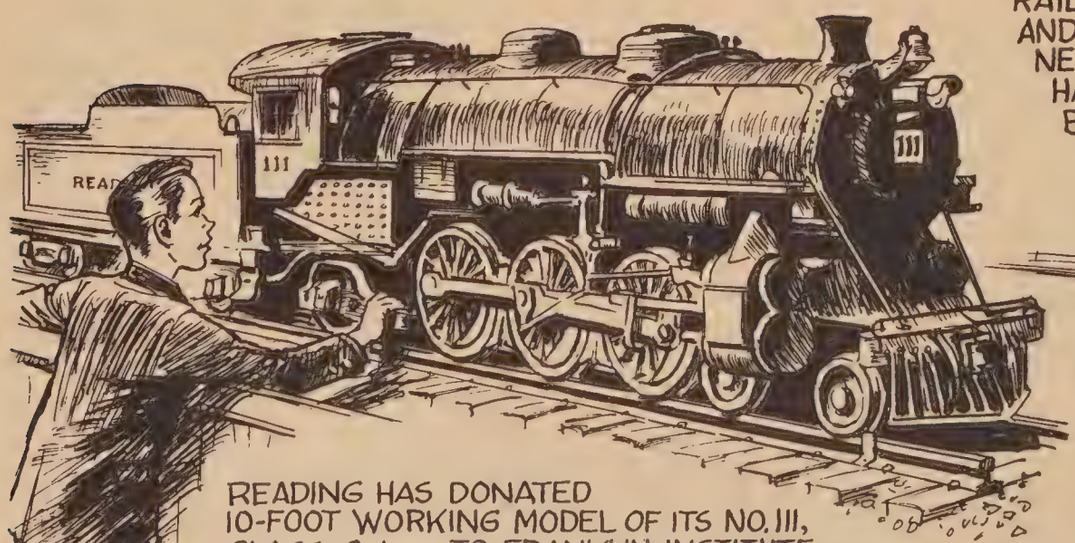
Along the Iron Pike

by Joe Easley

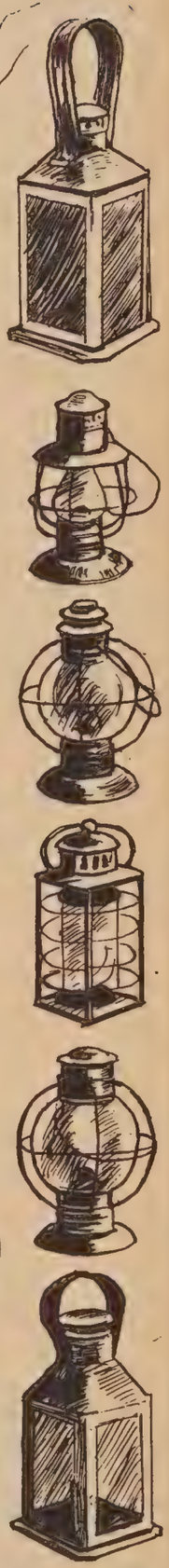
TRAINS AND AUTOMOBILES SHARE GREAT NORTHERN RR. TUNNEL AT ROCK REACH DAM, WASH. MOTORISTS USE IT AS A DETOUR WHILE HIGHWAY 97 IS BEING RELOCATED. GN FLAGMEN ARE ON DUTY AT BOTH ENDS OF TUNNEL 24 HOURS A DAY, 7 DAYS A WEEK. (*from Walt Thayer, Box 1634, Wenatchee, Wash.*)

ONLY ONE MAN IS NEEDED TO OPERATE SPERRY'S NEW, MIDGET, ULTRASONIC CAR THAT DETECTS AND MARKS INTERNAL RAIL FLAWS WHICH NO AMOUNT OF ORDINARY TRACK INSPECTION COULD SPOT. (*from Frisco Lines magazine All Aboard*)

CELAYA, MEXICO. 150 MILES N.W. OF MEXICO CITY. HAS TWO STREET RAILWAY LINES AND EVEN TODAY NEITHER OF THEM HAS ADVANCED BEYOND THE MULE-CAR STAGE.



READING HAS DONATED 10-FOOT WORKING MODEL OF ITS NO. 111, CLASS G-1-sa, TO FRANKLIN INSTITUTE, PHILADELPHIA. THE PROTOTYPE WON FAME IN MILE-A-MINUTE RUNS, CAMDEN-ATLANTIC CITY.



EARLY-DAY LANTERNS USED BY BALTIMORE & OHIO TRAINMEN. ONE AT THE BOTTOM WAS PATENTED BY J.H. ROHRMAN IN 1857. (*Courtesy of B&O Museum*)

SHE RAN ONLY IN WINTER

by William G. Westphal

BARNEGAT CITY'S famous "dummy" was an odd contraption, a wooden passenger coach with a built-in steam engine. The Manahawken & Long Beach Transportation Company on the New Jersey coast acquired her around the turn of the century and operated her faithfully for years through the sand dunes across a bridge that spanned the sparkling green and cobalt waters of Barnegat Bay, while seagulls wheeled and screamed overhead.

She ran only in winter time, sleeping out her summers lazily in the fishing and vacation resort village of Barnegat, N. J. This peculiar creature had an upright boiler to the left of the engine compartment up front. She was a one-man "train," painted brown and yellow, and she burned anthracite coal.

As the "cab" was cramped for space, you had to fire her from the outside. The firebox door, facing the front door of the engine-room, was a few inches over waist-high to a man standing on the sandy ground. As a rule the hogger would stoke her while she waited beside the small frame depot. He'd stand midway between the rails and toss coal through the open front door into the hungry firebox. One thing you must say, she always reached her destination, which was a good reason for bailing black diamonds into any steamer.

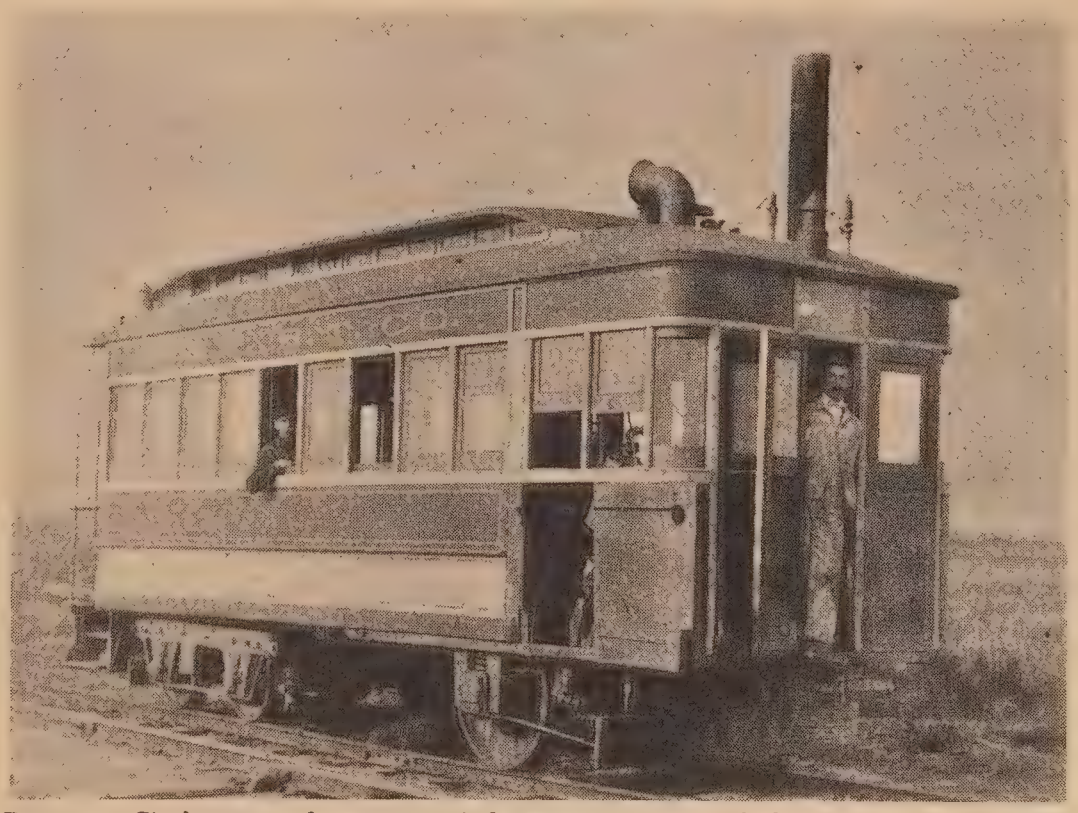
If you wanted to set her brakes while the dummy was galloping along the rails, rusted by salt spray from the restless breakers, you had to squeeze through an aperture between the engine-room and passenger section, walk down the aisle to the open platform at the rear, and twist the brake-wheel by hand.

This six-wheeled vehicle had seats for about two dozen passengers running lengthwise. Sim kerosene lamps illuminated her on dark foggy runs, while heat, such as it was, drifted in from the engine-room. Only an Eskimo could have been comfortable in the passenger section on raw January days when icy gales were lashing the bay.

The dummy had a built-in kerosene headlight, but she often ran in reverse, at which time a gleaming lantern set on the rear platform lighted her way. Fresh water was taken on at Harvey Cedars from a tank filled by windmill power and was stored in small tanks under the seats. The water came from an artesian well hardly more than a stone's throw from the briny Atlantic Ocean.

Manahawken & Long Beach equipment rolled over a T-shaped route with a short stem to Manahawken (now Manahawkin) on the mainland and a long T-cross running up and down the wind-swept island of Long Beach. Passengers for outside points changed to the Tuckerton Railroad at Manahawken and to the Pennsy and the Jersey Central at Whitings.

The M&LB also had a train known as *The Yellowjacket*. When this modest little streak of varnish rolled down the island she dropped passengers for the upper branch at Barnegat City junction,



Barnegat City's steam dummy carried passengers around the turn of the century.
George M. Crane, Barnegat, N. J.

WOULD YOU LIKE TO RECEIVE STACKS OF LETTERS LIKE THESE EACH WITH MONEY FOR YOU?

I have found a proven formula for quick success in making money. Others I've shared it with also have been successful. Would you like to know about it?

It's simpler than you might think — just buying good imports at next-to-nothing foreign prices and selling them in the U.S. by mail order or at wholesale to stores.

To most people, importing smacks of mystery, romance — and "costly" things for collectors. Actually, any capable and ambitious man or woman should learn import-export quickly. And, there are thousands of beautifully made imports obtainable at trifling cost abroad to sell in the U.S. by mail order. There are also great opportunities in exporting U.S. products.

Native villages in Africa, romantic Vienna, bustling Copenhagen, mysterious Hong Kong — yes, countryside hamlets and great cities all over the world produce fascinating products.

Using my plan, you don't have to travel abroad unless you want to. You don't even have to know a foreign language. And, there is no face-to-face selling in mail order.

I have proven this plan with 103 imports — and the opportunities for the sale by mail of thousands more are breathtaking in their possibilities. Hunting knives and binoculars from Germany, silverware from Sheffield, England — hand-carved art objects from Africa — all costing less than $1 abroad have values up to $5 or more here and are big sellers by mail order.

Monthly bulletins sent free to those who follow my plan show suppliers of new and desirable imports.

As I write this, I am receiving as many as 1,000 cash orders a day for imported clocks — all by mail order. They cost me only 63¢ and I sell them far below the U.S. market — a terrific bargain and a wonderful seller. And, I don't stock them as they are shipped direct to the buyers from abroad, *after I receive the cash.*

So you see, it is even possible to conduct a business of this kind without investing in merchandise.

Mrs. McGinn, one of my students in Illinois, operates a gift shop and sells Arabian perfume by mail order. F. Basler, N. J., sells Aztec bird feather pictures from Mexico to stores and by mail order.

You might ask, "Why do you let others in on your plan? Why don't you keep it all for yourself?" The answer is that items for import are countless. No one person could possibly handle even a small proportion of them. There's plenty of business in import-export for you and me and many others.

If you are sincere and really open-minded to a new and different opportunity — one which may change your whole idea of the kind of money you can make in your own full or part time business — write today for full details. Air mail reaches me overnight.

B. L. Mellinger, Director, Dept. X1121
1717 Westwood, Los Angeles 24, Calif.

— — — — AIR MAIL THIS COUPON NOW — — — —

B. L. Mellinger, The Mellinger Co., Dept. X1121
1717 Westwood, Los Angeles 24, Calif.

Mr. Mellinger: Without obligation, show me the big profits to be made through World Trade, especially in mail order from my own home.

Print Name.....

Address.....

Town & Zone.....State.....

from which point the dummy carried them up the island. But when *The Yellowjacket* took the upper branch the dummy remained at the junction and nothing on rails went to Beach Haven.

Time doesn't seem to have been a matter of much consequence on the Jersey sand dunes in those long-gone days. On a Saturday in winter, if you wanted to leave Beach Haven by rail but missed the mid-afternoon *Yellowjacket* you would have to wait until the following Tuesday morning for the next train.

North Beach Haven was the polling place for most of the island, and on the morning of Election Day the old dummy gathered up the voters along the line, like fishermen picking up their catch, and took them into town to cast their ballots and eat a picnic lunch, bringing them home in the afternoon. Transportation and food were free.

Oldtimers recall that a mongrel hound known as Rusty appointed himself mascot of the Manahawken & Long Beach line. This friendly dog would escort the dummy to the junction every morning and back to his home town around mid-day, a mile each way. He soon learned, perhaps by trial and error, that when the dummy made a second trip later in the day she would remain all night at the junction, so the dog ignored that run. But on the early trip Rusty would lope along joyously beside, behind, or even ahead of the six-wheeler. Down at the junction he would occupy himself mostly by sleeping in the dummy, and then would accompany her back to his home village—but no further. From there on, the dummy was strictly on her on.

Only once in her long and leisurely years on Long Beach island did the dummy misbehave. This occurred the day she arrived on a flatcar, probably from Philadelphia, and was set out on the rails at Manahawken. She'd been bought second-hand by the M&LB and the cause of her misbehavior was the narrow tread on her wheels. At any point where the track gage widened the least bit she would drop to the ground and head for the fields of cat-tails or make a break for the bay.

The 4-4-0 *Yellowjacket* engine started out for Long Beach with the newly-acquired dummy in tow. The brakeman and another guy were riding the six-wheeler. All went well through the fragrant pine woods and blackberry patches and meadows and the long bridge over the bay. But when they reached one of the small islands the dummy left the steel rails and came gently to rest leaning against a telegraph pole, which saved her from the disgrace of falling flat on her side. The engine stayed upright.

No one was hurt. A sweating section gang promptly rerailed the dummy. Needless to say, before going into service on Long Beach, this piece of equipment was fitted with wheels of a slightly wider tread.

These recollections came to your author from an old Barnegat man, George M. Crane. But don't start packing your suitcase for a trip to Long Beach to see the dummy. She passed into oblivion many years ago, as did the M&LB and the Tuckerton Railroad. You won't find a trace of rusted rails in the dunes today—only sword-grass, dragonflies, tiny scurrying sand crabs, and the murmur of surf breaking on the shore. ●

Mister, She's About the Last Steam-Powered Mixed Train You'll Ever See

Norfolk & Western Railway

"The Huckleberry," Norfolk & Western's last mixed train (which was also the last N&W steam train) made her final run August 9, 1958, with a 52-year-old Class M locomotive, after serving the 8.8-mile Blacksburg branch in Virginia for about 45 years. She was never dieselized. Today you won't find a mixed steam train in America except on the Rio Grande.

MAIL CAR

(Continued from page 10)

saying, '*Dos hombres, zwie pesos.*' On another occasion I was collecting fares on a freight when I saw the trainmaster watching me. But he said nothing. We would spend 'bo money on groceries for the *crummy* (caboose), and as the TM ate with us he got his share."

Says C. B. Swoyer, instructor in physical science, Otto-Eldred Joint High School, Duke Center, Pa., "A female hobo known as Boxcar Sadie used to ride Pennsy freights between St. Marys and Renovo, Pa." And a vigorous old boomer who had last worked on the Chicago & North Western drifted into our office the other day with facts and figures about a similar character that would curl the tail of a brass monkey. His remarks will not be printed.

The following letter comes from Bob White, Grand Trunk section foreman, N. Fifth 514 St., Grand Haven, Mich.: "'Dollar a Division' recalls memories of the 50 cents I paid a *shack* (brakeman) a long time ago to ride the Texas & Pacific near Ranger, Texas. Thereafter I looked upon shacks as *bulls* (policemen) and kept out of their sight.

"They never gave me much trouble, but the bulls were a lot smarter and harder to shake off. I dressed as a *gandy dancer* (track worker) and would follow extra gangs around the country. Altogether, I worked with gangs on 22 railroads. I knew a lot of *king snipes* (section bosses) who ran those gangs, so when a bull actually did nab me I would tell him that I was on my way to this or that gang or roadmaster, mentioning a name." ●

UNIQUE new ticket called *Eurailpass* (pronounced "your rail pass") goes on sale Jan. 1 in North America. It permits unlimited travel for two months on the railways (plus certain river and lake steamers) in 13 countries of Western Europe. Flat price $125, includes seat reservation charges and extra-fare trains.

Eurailpass is valid on 100,000 miles of rail lines in Austria, Belgium, Denmark, France, West Germany, Holland, Italy. Luxembourg, Norway, Portugal, Spain, Sweden, and Switzerland. Its purpose is to simplify foreign travel. You can ride over all Western Europe with only one ticket in your pocket. *Eurailpass* is sold by U. S. and Canadian travel agents and by North American offices of the participating railways but is not sold overseas.

You can get an illustrated folder and map free by writing Pierre Deshayes, chairman, *Eurailpass* Committee, c/o French National Railroads, 610 Fifth Ave., New York City. ●

NEWS ITEMS. The Reading Railroad announces results of an exhaustive series of tests which show that a new "dry" lubricant applied directly to locomotive wheels reduces rail wear on curves by an average 35 per cent. The findings were based on four years of tests on curves of the mountainous Catawissa branch.

Missouri Pacific has rejected a plan to merge with the Texas & Pacific on the ground that an end-to-end merger such as this one would not yield the economies which often result from a merger of parallel lines.

Dollar meals introduced recently in Wabash dining cars include such menus as beef stew, bread and butter, coffee or tea or milk, and pudding. You can't beat that in any other railroad diner we know of.

The manuscript of Peter Josserand's "Push-Button Yards" (Oct. '58) referred to "less-than-trainload lots," but in cutting type to fit the third column on page 21 we shortened it to "LCL," which is inaccurate. Don't blame Pete.

A ten-mile stretch of track operated jointly by the New York Central and the Chesapeake & Ohio in southeastern Ohio is odd in that a *north*bound NYC train and a *south*bound C&O train passing over this track are both headed toward Columbus, reports W. P. Grant, 303 University Ave., Oxford, Miss. This oddity lies between Hobson and Kanauga, opposite Point Pleasant, W. Va. Who knows of a similar situation?

Arthur H. Morey of Erie, Pa., who began his career as a railroad fireman, has just received George R. Henderson medal from the Franklin Institute of Philadelphia for his work in connection with the development of the gas-turbine-electric locomotive. Mr. Morey is manager of the Railroad Locomotive Advance Engineering Unit of General Electric Co.

With the Norfolk & Western almost

Bass Fisherman will Say I'm Crazy . . .

until they try my method

But after a fair trial, if you're at all like the few other men who know, you'll guard it with your last breath

I have no fishing tackle to sell. I make a good living out of my regular profession. But fishing is my hobby. And because of this hobby, I discovered a way to get those giant bass—everytime I go after them—even in waters most fishermen say are "fished out."

I don't spin, troll, cast or use any other method you ever heard of. Yet, without live or prepared bait, I can come home with a string of 5 and 6 pound beauties while a man twenty feet away won't even get a strike. You can learn my method in a few minutes. It is legal in every state. All the equipment you need costs less than a dollar and you can get it in any local store.

No man who fishes your waters has ever used my method—or even heard of it. When you have tried it—just once—you'll realize what terrific bass fishing you've been missing.

Let me tell you about this method—and explain why I'm willing to let you try it for the entire fishing season without risking a single penny of your money. There is no charge for this information. But I guarantee that the facts I send you can get you started toward the greatest bass fishing you have ever known. Send me your name today—on the handy coupon. You've got a real fishing thrill ahead of you.

ERIC H. FARE, Highland Park12, Ill.

Eric H. Fare,
HIGHLAND PARK 12, ILLINOIS

Dear Mr. Fare: Please send me complete information without any charge and without the slightest obligation. Tell me how I can learn the method of catching big bass even when old-timers are reporting "no luck"

Name.....

Address.....

City.....Zone.....State.....

GOVERNMENT OIL LEASES LOW AS $1 PER ACRE

You do no drilling, pay no taxes, may realize a king-size profit without even leaving home. Write for free map and literature.

American Oil Scouts, Dept. AM, 7321 Beverly Blvd. Los Angeles 36, Calif.

ARTIFICIAL EYES

● Large assortment glass or plastic human eyes sent to your home for free inspection. Low prices. Book and color chart free. *Established 1906.* Write . . .

DENVER OPTIC CO., 1173 Univ. Bldg., Denver 2, Colo.

RUPTURED

BE *FREE* FROM TRUSS SLAVERY

Surely you want to THROW AWAY TRUSSES FOREVER, be rid of Rupture Worries. Then Why put up with wearing a griping, chafing and unsanitary truss. For there is now a new modern Non-Surgical treatment that is designed to permanently correct rupture. These Non-Surgical treatments are so certain, that a Lifetime Certificate of Assurance is given.

Write today for our New FREE Book that gives facts that may save you painful, expensive surgery. Tells how non-surgically you may again work, live, play, love and enjoy life in the manner you desire. Write today—Dept. H1005

Excelsior Medical Clinic, Excelsior Springs, Mo.

BACK AGAIN and BETTER

1959 American Locomotive Calendar

LARGER . . . ALL NEW PHOTOS

Bringing you 12 full months of

STEAM

or DIESEL Railroading

Delaware & Hudson's Alco Built 4-4-0 #1138

1959		JANUARY				1959
SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

- Different photos each month, 12 per Calendar
- 57% Larger picture, 5"x6" size
- EASEL STAND, SPIRAL BOUND
- EITHER STEAM or DIESEL

The Steam Calendar Contains:

Small engines including Colorado's narrow gauge; medium and heavy 8 and 10 coupled power; modern mallets and cab-in-fronters.

The Diesel Calender Features:

Alco, Baldwin, FM, and EMD power . . . in cab, hood, and double-ender types. GE bi-polar electric.

Only $1.00 each, postpaid
Or Both for $1.90

FIRST TIME AVAILABLE
RAILROAD CHRISTMAS CARDS

Featuring Six Historic Locomotives:

B&O Grasshopper "Atlantic", NYC 4-4-0, PRR 2-4-4 "John Lucas", D&RG Narrow Gauge, AT&SF "Chief" (steamer), Broadway Limited (electric).

12 cards (approx. 3"x6½") per box, 2 of each kind. Envelopes included. You'll want several boxes at **$1.00 each, postpaid.**

BOTH CALENDARS & 1 BOX CARDS
$2.75, postpaid

Locomotive Calendars
Box 11, Station "O"
Cincinnati 8, Ohio

Enclosed find ..... Please send:

.....Steam Calendars

.....Diesel Calendars

.....Boxed RR Cards

Name .....

Address .....

City & State .....

all dieselized, O. Winston Link, 58 E. 34th St., New York City, reports an increasing demand for his *Sounds of Steam Railroading*, one of the best LP hi-fi 12-inchers of its kind, made along the N&W. The disk offers such nostalgia as chime whistles, a hotshot freight switching at a junction, a Mallet roaring by, a depot train announcer, and the like: $4.95, postpaid.

Ernie Plant, president of Pacific Great Eastern and Rail Travel Boosters, Box 40, Horseshoe Bay, B. C., Canada, sells bolo ties with locos on them, steam or diesel, $2.50 each; also 4-inch felt crests of CPR, CNR, GN, NP, SP&S, authentic colors, $1 apiece. "Not in business," he says, "but go out of my way to get items for railfans."

Long Island RR. wins top honor in public relations field, the *Public Relations News* annual achievement award of 1958, for "creative work in humanizing the road." Much credit belongs to Jim Schultz, LIRR public relations director.

B&M has given engine 3713 to Edaville RR. and is keeping her at Fitchburg, Mass., until funds are raised to take her to South Carver, Mass., reports Dave Decker.

The Chesapeake & Ohio, which purchased and installed the first electronic "Hotbox Detective" on any railroad, is so impressed with the performance of the device that it will put in a second. This will be followed by ten more installations as soon as delivery can be obtained. The detector unit, resembling a box camera, is located outside the rails and has an "electric eye" lens pointed up at the axles of moving railroad cars. The equipment records on tape the temperature of every journal box, or axle-bearing housing.

In order to recapture some of the freight business lost to trucks in recent years, the Long Island Rail Road inaugurated a unique daily "Spud Special" to speed potato shipments from eastern Long Island to the New York City markets. Rail rates are exactly half the rates that trucks regularly charge for potatoes.

Charles Sterling Wallace, longtime boomer pal of the late Harry Bedwell and mentioned as "Wally Sterling" in many Bedwell stories, is fighting a serious heart ailment at 742 Ocean View Ave., Monrovia, Calif. Maybe a few of our readers will send him a "get well' card. Before his illness, Charlie had won fame as a writer of detective stories.

BILL KNAPKE'S article on "Flags and Bunting and Black Crepe" (June '58 issue) brought back memories of the old Chicago, Peoria & St. Louis to Abe Henderson, Bellflower, Calif.

"I was on an extra north, firing for George Bollman, engine 53," he writes, "when they stopped us at Pekin, Ill., to set out our freight train, go to the Sante Fe transfer, and get a political special of some kind and take it to Jacksonville, Ill.

"George growled that we'd have to take those damn Republicans to Jacksonville even though the 53 wasn't decorated for the occasion. But when the Santa Fe showed up for Chicago all of the coaches were dolled up with bunting and streamers. Well, we coupled onto those varnished cars and lit out. The 53 was a little ten-wheeled Rogers, and could she run!

"It was about the fastest and roughest ride I ever had. We couldn't keep the oil cans on the tray—everything, including the fireboy, was bouncing on the deck. The bunting sailed off over the cornfields. There were only a few streamers left when we got to Jacksonville. We layed over there until the parade and speeches ended. Then we picked up the passengers and took them back to Pekin, after which we picked up our boxcars and highballed to Peoria.

"Chicago and St. Louis newspapers carried stories about the fast ride, printing the names of the hogger, conductor, and brakemen, but none of them mentioned the ashcat who had made it possible."

RECENTLY we published the name and address of an English-speaking resident of Poland who wanted to read *Railroad Magazine* but his government would not permit money to be sent out of the country to pay for a subscription. Two patriotic Americans came to his rescue. Each felt that *Railroad* would help to carry the message of democracy behind the iron curtain. Each sent us a $6 check to give the Polish railfan a subscription. We accepted the first check—from William E. Sloan, Jr.,

Rochester, N. Y.—and returned the second. The Pole is now getting *Railroad Magazine*. We hope he will tell us how he likes it. ●

IT HAPPENED just after midnight on the first day of 1907," recalls W. G. Oldham, 246 Moline St., Long Beach, California.

"I was a young telegrapher working second trick for the San Pedro, Los Angeles & Salt Lake (now Union Pacific) at Alton, Calif. Heavy snow melting down the mountains was washing out bridges along the Mojava River. A track inspector named Wilson came by on a three-wheeled velocipede to check the bridge that stood about two blocks from my station, and I went with him.

"The dark rushing water roared so loudly that we had to shout to each other to make ourselves heard. Wilson held up his lantern and was walking gingerly onto the bridge when it collapsed. With a frightful scream he disappeared. Hurrying down to the rivers' edge, I climbed out onto a huge rock to look for him. The rock began sinking. I retreated quickly and yelled. Wilson's answer was the sweetest music I've ever heard. He clung to a loose paling that threatened to break off, shouting, "I can't swim,' but he finally managed to escape." ●

BESIDES being editor of *Transit Topics*, Steve Maguire is justice of the peace at Belmar on the New Jersey coast. While driving to a local store the other day, he saw two young soldiers attacking Fred Carey, a bartender. They fled in a waiting car with a third man. Steve stepped on the gas in hot pursuit, but lost his quarry in the nearby town of Avon. He then gave police a description of the getaway car. Hours later, three service men from Fort Monmouth were picked up and arraigned before Steve. A newspaper account says: "The magistrate, now attired in his judicial robes, ordered all three held for the grand jury." ●

STEEPEST grade for steam adhesion locomotives in regular service, 7 percent, was on the narrow-gage Uintah Railroad (now abandoned) in the Wasatch Mts. of Utah, using 2-6-6-2 steam locomotives, according to Hugh F. Stephens, 223 Trenton Blvd., Sea Girt, N. J., answering a query in our Oct. '58 issue, page 78.

"Steepest grade for steam adhesion

MEAT CUTTING Offers YOU SUCCESS And SECURITY

In The Best Established Business In The World • PEOPLE MUST EAT!

TRAIN QUICKLY in 8 short weeks for a bright future with security in the vital meat business. Trained meat men needed. Big pay full-time jobs year-round income, no layoffs—HAVE A PROFITABLE MARKET OF YOUR OWN!

LEARN BY DOING AT NATIONAL
Get your training under actual meat market conditions in our big modern cutting and processing rooms and retail department.

PAY AFTER GRADUATION
Come to National for complete 8 weeks course and pay your tuition in easy installments after you graduate. Diploma awarded. Free employment help. Thousands of successful graduates. OUR 36th YEAR!

FREE CATALOG—MAIL COUPON
Send now for big new illustrated National School catalog. See students in training. Read what graduates are doing and earning. See meat you cut and equipment you work with. No obligation. Send coupon in envelope or paste on postal card NOW! G.I. Approved.

NATIONAL SCHOOL OF MEAT CUTTING, INC.
Dept. AD-32 Toledo 4, Ohio

National School of Meat Cutting, Inc.
Dept. AD-32, Toledo 4, Ohio
Send me your FREE School catalog on National Training at Toledo in Meat Cutting, Meat Merchandising and Self Service Meats. No obligation. No salesman will call.
Name.....Age.....
Address.....
City.....State.....
Approved for Veterans

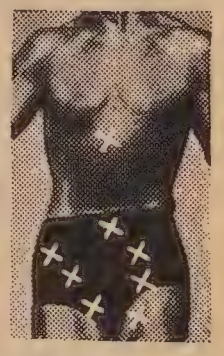
Let me show you

HOW TO SPEAK AND WRITE LIKE A COLLEGE GRADUATE

I have helped thousands of men and women who have not had college training in English to become effective speakers, writers, and conversationalists. With my new C. I. METHOD, you can stop making mistakes, build up your vocabulary, speed up your reading, develop writing skill, learn the "secrets" of conversation. You don't have to go back to school. Takes only 15 minutes a day at home. Costs little. 32-page booklet mailed FREE upon request. Send me a card or letter TODAY!

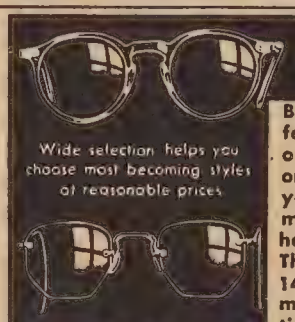
Don Bolander, Career Institute
Dept. E102 , 30 E. Adams St., Chicago 3, Illinois
Please mail me your FREE 32-page booklet on English.
Name_____
Address_____
City_____Zone_____State_____

LOOK for Rupture Help



Try a Brooks Patented Air Cushion appliance. This marvelous invention for most forms of reducible rupture is GUARANTEED to bring YOU heavenly comfort and security—day and night—at work and at play—or it costs you NOTHING! Thousands happy. Light, neat-fitting. No hard pads or springs. For men, women, and children. Durable, cheap. **Sent on trial to prove it.** Not sold in stores. Beware of imitations. Write for Free Book on Rupture, no-risk trial order plan, and Proof of Results. Ready for you NOW!

BROOKS APPLIANCE CO., 100 State St., Marshall, Mich.



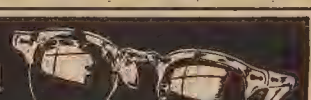
Wide selection helps you choose most becoming styles at reasonable prices

SEND NO MONEY! 10 DAYS TRIAL!

EYE GLASSES BY MAIL? IT CAN BE DONE!

Buy from the oldest established firm offering this service. Reading-magnifying or bi-focal glasses for far and near. Recommended for folks approximately 40 years or older who do not have astigmatism or disease of the eye, and who have difficulty reading or seeing far. Thousands of customers! We furnish 14- lens sample card with many combinations and other styles priced to meet your budget.

as low as $1.95



SEND FOR FREE catalog

attractive styles for men and women

name_____
street_____
city state Dept. Adv.

ADVANCE SPECTACLE CO., INC.
537 S. Dearborn St., Chicago 5, Ill.

Invest in Tomorrow Buy Bonds, Today!

CUT-TO-FIT HOMES CUT BUILDING COSTS

CHOICE OF 57 DESIGNS

Build your own home and save the builders' profit—plus savings in lumber and labor with Sterling Ready-Cut-Homes. Anyone can assemble with simple, easy to follow plans furnished. Every house complete with all lumber, roofing, nails, glass, hardware, paint, doors and windows, marked ready to erect. Freight paid. Complete building plans ready for filing at low cost. Sold separately if desired. Write today!

ORDER NOW
SAVE UP TO 1/3
PRICED FROM $2150 UP
Five Easy Payment Plans
Send 25c for NEW COLOR CATALOG

INTERNATIONAL MILL AND TIMBER CO.
DEPT. AD29 BAY CITY, MICHIGAN

A SPECIAL OFFER TO READERS OF RAILROAD MAGAZINE

Perhaps you did know that you can buy low cost HO models of new railroad equipment such as the Aerotrain, the Budd Car, GP-9, and F-7. Or that there are full scale models ready to run of such glamorous old timers as the 1865 General.

Have you ever yearned to own full scale custom built replicas of the Sierra 2-6-6-2 or the Pennsy E-6. Would you like to build your own full scale model railroad easily and at low cost?

Model railroading has never offered so many wonderful models as today and at such low cost. And model railroading has never been easier. Not only are there hundreds of fun-packed kits but you can now also buy most everything you need ready to run. Even scale track comes in easy to snap together sections.

A model railroad brings back railroading as you've dreamed about, because you only model what you like. Mountain railroading or heavy main line. Colorado narrow gauge in the old Otto Mears tradition, or trolley modeling with power right off the overhead.

RAILROAD MODEL CRAFTSMAN is the magazine that'll tell you how and where to get all this material and then how to put it together. Each big monthly issue is packed with the latest news on the hobby, construction projects, prototype plans of locos and cars, and much more.

Because we feel so sure that RAILROAD readers would enjoy rounding out their railroad hobby, we're making this special offer. You can get the next 15 issues of RAILROAD MODEL CRAFTSMAN for the regular subscription price of only $5.00. This is a $2.50 saving over the newsstand rate. RMC is mailed flat in a heavy protective envelope. Rush your subscription today.

RAILROAD MODEL CRAFTSMAN
Subscription Dept., Room RR
Ramsey, New Jersey

Please rush me the next 15 issues of RAILROAD MODEL CRAFTSMAN at the special money saving rate of only $5.00.

Name .....

Street .....

City and Zone.....State.....

Please add 50c outside U.S.A. and Canada

locomotives in temporary service," he adds, "was on the Baltimore & Ohio somewhere in the Allegheny Mts., 10 percent. The road's most powerful locomotive could haul only one loaded boxcar at a time over the mountain. Completion of a tunnel did away with this grade.

"Steepest grade on a rack (cog) railway is, I believe, on the Mt. Washington cog Cog RR in New Hampshire." ●

STEAM locomotives will never die so long as we can listen to authentic sound recordings such as the new LP hi-fi 12-inch disks made by Stan Kistler along the Union Pacific tracks in Utah, Wyoming, and Colorado a year and a half ago. His *Big Boy*, Vol. 1 of *This Is Railroading*, brings to our ears some of the world's largest locomotives plus other UP steam power.

UP had 25 giant 4-8-8-4 single articulateds built by Alco in 1941 and '44, each 132 feet long and weighing almost 500 tons. Stan's new record opens with No. 4002 whistling for an air-brake test in Rawlins Yards and then her 100-car westbound freight pulls out. We hear the clank of draft gear, the hiss of power reverse, and cylinder cocks popping as the hogger takes slack.

After that, for 35 exciting minutes, we tour the rails on various UP engines, working mountain graves with exhausts reverberating, switching cars, or thundering by at 65 mph., whistles screaming. We even hear a mighty gas-turbine; and finally the whistle of No. 3701, blasting through Weber Canyon, fades tremulously into the distance.

Stan Kistler, P.O. Box 4068, Pasadena, Calif., sells *Big Boy* at $5 postpaid (plus 50c for Canadian orders or first-class or insured postage). The railroad operations it features are available in 16mm color movies on a limited basis, Stan being a professional camera man as well as a sound recorder. *Farewell to Steam*, his 12-inch recording of a Santa Fe 4-8-4's last run, also sells at $5. ●

DOUBLE-PAGE photo of a Clinchfield train in our Oct. '58 issue drew this comment from Emil Graf, Hornlistrasse 28, Kusnacht, Zurich, Switzerland: "Contrary to standard practice today, by which two spikes on the inside and one spike on the outside of the rail are used, this picture shows just the opposite. Can any reader tell me why?" ●

The lore, the lure, the fascination of railroading brought to you in these fine books for model rails and railfans.

For more advanced reading on specialized model railroad and railroad subjects, these books are a must. Start adding to your own railroad library today.

RA-5 2-6-0 MOGUL ALBUM, by H. H. Carstens. 48 Kromekote pages showing this loco 69c
RA-6 0-4-0 LOCOMOTIVE ALBUM, by Carstens. Traces history of 0-4-0 from 1829 thru today 69c
102—NEW ROADS TO ADVENTURE IN MODEL RAILROADING, by Louis Hertz. New ideas. $4.95
103—ADVANCED MODEL RAILROADING, by Hertz, 352 pages, 165 illus. Creative inspiration. $4.95
110—TRAINS TRACKS & TRAVEL, Van Metre. Colorful history of railroading from early days. $4.95
104—COLLECTING MODEL TRAINS, Hertz. Authoritative work on interesting phase of hobby. $5.75
101—COMPLETE BOOK OF MODEL RAILROADING, Hertz. Covers every phase of modeling $4.95
135—ELECTRIC HANDBOOK FOR MODEL RAILROADERS, Paul Mallory. Most complete work. $5.25
201—RIDING TINPLATE RAILS, Hertz. History of early toy train makers. Delightful. $5.95
353—HOW TO BUILD A MODEL RAILROAD, Loose. Step by step in building a model RR. $2.00
136—BRIDGE & TRESTLE HANDBOOK FOR MODEL RAILROADERS, Mallory. Comprehensive guide. $4.95
203—HANDBOOK OF OLD AMERICAN TOYS, Hertz. All types of toys from 1860-1940. ..... $3.95
401—FRANK ELLISON ON MODEL RAILROADS. A must for all beginning scale modelers. $2.00
405—MODEL RAILROAD BOOK, Morgan. A must for all ready to run fans in any gauge. $2.00
202—MESSRS IVES OF BRIDGEPORT, Hertz. If you've owned Ives, get this. $4.50

PC-1 O-S GAUGE CUTOUT BOOK. Complete cutout model railroad village in color. $1.00
PC-2 RMC CUTOUT BOOK—HO. Complete HO full color village, 20 buildings. $1.00
PC-3 HO SCALE CUTOUTS. Similar to PC-2 but with different buildings, for HO $1.00
PC-4 ROLLING STOCK MANUAL. Plan book of freight, passenger cars. Over 100. ..... $1.00

701—AGE OF STEAM, Beebe & Clegg. Beautiful pictures and text. A must. $15.00

Please add 10c postage on orders under $2.00

PENN PUBLICATIONS, INC.
Book Dept., Room RR
Ramsey, New Jersey

I enclose $ ..... Please send me the books I have listed with this order.

Name .....

Street .....

City and Zone.....State.....

Please print or type clearly

Steam locomotives are just about making their last stand in Canada. We see No. 3100, a Canadian Pacific 4-8-4, Class H1a, wheeling an extra eastbound in Manitoba.

Fred Sankoff, 25 Botfield, Toronto, Canada

Railroad Hobby Club

by SY REICH

RETURNING from a three weeks' trip through Canada, on which he took over 100 action shots of steam trains on the Canadian National and Canadian Pacific, Fred Sankoff, 25 Botcield Ave., Toronto, Canada, reports:

Sy Reich

"Steam was given a new lease of life in the late summer and early fall, with grain moving and the CNR acquiring a vast quantity of oil at a reduced rate, which in turn brought a lot of steam engines back into service, besides the conversion of many coal-burners to oil, which was done for the most part in the Stratford shops, at Transcona and at Winnipeg.

"I understand H. L. Kelso is writing an article on the Hudson type. Here in Canada we are proud of our two representatives in this type, the CPR's 2800 Class—the non-streamlined H1a and H1b numbered from 2800-2819—and our Royal Hudson 2820-864, as well as our speedsters, the 5700's, with 80-inch drivers.

Regarding Kelso's article on "The 4-8-4" (Dec. '58 issue), Fred writes: "This type was very popular on the CNR, but the CPR was more impressed with the 4-6-4, and built only two Northern types, Nos. 3100 and 3101, in their Angus shops at Montreal in 1928. Both have been scrapped."

A 16-page brochure on the steam-powered Rockaway Valley RR. has been published by Howard E. Johnston, 422 Tate Court, Plainfield, N. J., with 13 pictures and map, printed on heavy slick paper, $1.25. De luxe edition, 20 pages, 6 more pix, $2. The RV was a colorful New Jersey shortline, abandoned in 1913. The author says this booklet represents 20 years of research.

Fantrip on Washington's Birthday week-end sponsored by NRHS, Southern Region, from Washington, D. C. to St. Augustine, Fla. Leave 6:45 p.m. Friday, Feb. 20; return Mon. eve. Special events. Price, incl. reserved coach seat and hotel (2 to a room), $55 (children, $35). Luxury travel, $110 ea. Contact Carrel I. Tod, 1908 N. Quintana St., Arlington 5, Va.

Copies of railroad periodicals published in either English or Spanish are wanted by John Silva, S. del Carril

"BIG BOY"

A long-playing record featuring the sounds of the world's largest steam locomotives.

For the railroad enthusiast, model railroader or for just plain nostalgic listening this record is a must. Thrill to the sounds of a giant 4-8-8-4 working up a grade or thundering by at 65 MPH, or the nostalgia captured in the mournful whistling of a 2-8-2 that passes in the night. Here too are the mighty Challenger 4-6-6-4's battling the Wahsatch grade, their twin exhausts and deep-toned whistles echoing off canyon walls. All types of UNION PACIFIC steam locomotives are presented on this 35 minute, 33⅓ RPM long-playing full fidelity record, custom pressed by Capitol Records. Comes in attractive illustrated jacket.

Yours for just $5.00, Postpaid. (Add 50¢ for Canadian orders or First Class postage.) Mailed in heavy corrugated box for your protection. Send your check or Money Order today to:

Still available: "Farewell to Steam" the documentary in sound of a Santa Fe 4-8-4's last run. 33⅓, LP just $5.00. SPECIAL—Two records, either "Big Boy" or "Farewell to Steam" only $9.50, Postpaid!

STAN KISTLER
P.O. Box 4068 Pasadena, California

SEND FOR THIS FREE!

Make money. Know how to break and train horses or ponies. *Write today for this book FREE,* together with special offer of a course in Animal Breeding. If you are interested in Gaiting and Riding the saddle horse, check here ( ). *Do it today—now.*

BEERY SCHOOL OF HORSEMANSHIP
Dept. 841 Pleasant Hill, Ohio

High School Course at Home Many Finish in 2 Years

Go as rapidly as your time and abilities permit. Course equivalent to resident school work — prepares for college entrance exams. Standard H. S. texts supplied. Diploma. Credit for H. S. subjects already completed. Single subjects if desired. High school education is very important for advancement in business and industry and socially. Don't be handicapped all your life. Be a High School graduate. Start your training now. Free Bulletin on request. No obligation.

American School, Dept H139 Drexel at 58th, Chicago 37

EPILEPSY!

Learn about treatment for epileptic spells! Write today for free information.

Lakewood Neurophen Co., Station A,
Dept. MG-2 Cleveland 2, Ohio

Kruger Pistol Bargain $3.00 post paid

.12 CALIBER SINGLE SHOT

Crafted after famous German Luger design. Not an air or CO_2 gun. This is a small bore gun that actually shoots .12 caliber lead bullets fired by light 14 mg. powder charge. Beautiful gun, swell for target shooting. 4" steel barrel in knurled styrene stock. Overall length 8¾ inches. This amazingly low price is due to ball-and-cap design. Comes with 50 bullets, instructions, and target. Money back if not satisfied. At your sports dealers or send $3 to KRUGER CORP., Kruger Building, Box 709R, Alhambra, California

SAVE 75% ON WORK CLOTHES!

Terrific values you've got to see to believe!

SHIRTS 4 for $2.99 79¢

Made to sell for 2.99. Now, 4 for the price of one! Tho used, sterilized and ready for long, tough wear! In blue, tan or green. *Send neck size, 1st and 2nd color choice.*

PANTS to match

Sold for 3.85, now only..... 99¢

Send waist measure and inside leg length. 4 for $3.75

COVERALLS . . . wear 'em used and save plenty! Were 6.95, now $2.29

Send chest measurement. 3 for $6.75

MONEY BACK GUARANTEE . . . if not satisfied. Order TODAY! Send $1.00 deposit on C.O.D. orders. Add 25c for postage on prepaid orders.

GALCO SALES CO. Dept.401

7120 Harvard Ave. • Cleveland 5, Ohio

"PSYCHIC DOMINANCE

How to RULE OTHERS with your THOUGHTS." Full course—with stirring exercises. (ADULTS). $3. NO C.O.D. Satisfaction or refund. CLARION, 846-N Sunnyside Ave., Chicago 40, Ill.

"HYPNOTIZE

With ONE WORD, ONE FINGERSNAP," on stage.....$2. Sat. or ref'd. Hypnomaster, 846-N S'nyside, Chicago 40

COBRA

Self-Defence Street-Fighting Tricks." Designed to help peaceful adults. $2. These are vicious days. GAUCHO, 846-N Sunnyside Ave., Chicago 40, Ill.

WHERE'S YOUR BADGE!

OFFICIAL SPREAD EAGLE SHIELDS

NICKEL AND GOLD

A quick flash of one of these gleaming official-looking metal badges instantly shows who has the power! Finest quality with reinforced backs and pins for heavy duty. Available in standard size.

ONLY $1.98 POSTPAID

Or Miniature $1.25 POSTPAID

Your Choice: Special Officer, Private Watchman, Deputy Sheriff, Constable, Watchman, Sheriff, Special Deputy Sheriff, Police, Special Police, Private Detective, Special Investigator.

Also Available: 6 shot. 22 cal. Blank Automatic — $7.95, Holster, $3.50, Police Handcuffs—$9.50, Cuff Case—$3.50. Send 10c for Bargain Catalog.

FREE!! For limited time only, authentic Badge Carrying Case FREE with each order.

BIG THREE ENT., INC. 1109 Sixth Avenue, New York 36, N. Y., Dept. AG-1

LAW FREE BOOK THE LAW TRAINED MAN

Write today for a FREE copy of illustrated law book, "THE LAW-TRAINED MAN," which shows how to earn the professional Bachelor of Laws (LL.B.) degree through home study of the famous Blackstone Law Course: Books and lessons provided. Moderate cost; easy terms. Write now.

Blackstone School of Law, 307 N. Michigan Ave.

Founded 1890 Dept. 421, Chicago 1, Illinois

EAR NOISES relieved!

. . . such results reported by thousands! SEND TODAY for proof of how many found good hearing and relief from those miserable ear noises, caused by catarrh of the head! That's what these men and women (many past 70) reported after using our simple Elmo Palliative HOME TREATMENT! It may be the answer to your prayers. Absolutely NOTHING TO WEAR! You, too, may enjoy good results like thousands have reported, during our past 20 years, if you suffer with such conditions. Write today for PROOF OF RELIEF and WONDERFUL OFFER OF 30 DAY TREATMENT ON TRIAL! Send NO MONEY . . . pay ONLY if helped!

THE ELMO COMPANY

Dept. 9AD2 DAVENPORT, IOWA

1880, Santa Fe, Argentine, who is a locomotive engineer and instructor on the Santa Fe Ry. of Argentine.

Railroad map of U. S., overall size 52 x 37 inches, has been prepared by Rand McNally for Lionel Corp., 15 E. 26th St., New York City. Printed in full color, it shows the routes of 65 major railroads keyed for easy identification. The colorful herals of these roads are reproduced in the map's margin. Price $1.95 at Lionel dealers.

Newark Model Railroad Club, 325 16th Ave., Newark, N. J., is among the largest O gage clubs in America. "Everybody living in the metropolitan area of Greater New York is invited to our 'open house' from 8 to 11 each Friday night, free, without obligation," writes Secretary Ben Smith, 265 Tompkins Ave., Brooklyn 16, N. Y., "but please phone my home beforehand: NEvins 8-4311. We have 7,000 feet of track, 250 engines, 2500 cars, and five panel boards."

Printing and distribution schedules force us to close *Switch List* and *Model Trading Post* about 10 weeks before *Railroad* hits the newsstands. Deadlines for those sections, Dec. 15, Feb. 16, etc., do not apply to timely items such as advance notices of fantrips, for which we have a little more leeway.

As we go to press, Grand Trunk Western is still using steam on its Detroit-Muskegon passenger run (the last regularly scheduled steam passenger trains in America), but delivery of new diesels due in late November (1958) will dieselize that run.

The C&O, fully dieselized since 1956, has 70 oilburning steam locomotives in storage, mostly at Russell, Ky.; New Buffalo, Mich., and Peach Creek, W. Va. The road is operating a steam fireless switching engine at Union Carbide plant, Charleston, W. Va.

Northern Pacific Railway

Last steam on the British Columbia mainland consists of 0-6-0 switchers 4012 and 4076 on Pacific Coast Terminals switching road at New Westminster, says Norman Gidney, 2621 E. 29th Ave., Vancouver, B.C., Canada. He denies a published report that Simpson Logging Co., Yacolt, Wash., is operating a steam locomotive.

Jim Scribbins, 3203 S. Howell Ave., Milwaukee, Wis., is compiling a detailed list of steam locos on display in parks, museums, etc., for this magazine. He welcomes information.

One of model-building's highest honors has been awarded to Lawrence W. Sagle of the Baltimore & Ohio public relations staff for having designed the B & O's nationally famed model layouts, namely, a large O gage, a portable HO, and a permanent HO in the B&O Transportation Museum.

Larry Sagle

For this he receives a life membership in the National Model Railroad Association because of "invaluable and meritorious service" to the cause of model railroading. In NMRA's 22-year history only six other men have been so honored.

Next Issue — April (out Feb. 3)

THE HUDSON STORY, by H. L. Kelso, includes world's long-distance speed record made by a 4-6-4. (Coming soon: The 4-8-2.)

WRECKING BOSS'S WIFE. Laura Brunner tells how it feels to be married to the foreman of a Santa Fe wrecking crew.

SAWMILL RAILROADING. "Frog" Smith recalls exciting days and nights on logging outfits in Florida and Georgia.

Plus Harry Bedwell's NIGHT TRICK AT ARMADILLO, locomotive roster, many pix, short hauls, departments, steam color-photo cover.

Described by H. L. Kelso in our Dec. '58 issue as the most famous of all 4-8-4's, Northern Pacific's 2626 has just been scrapped at South Tacoma, Wash. Originally Timken Roller Bearing Co. No. 1111, she was tested on the tracks of 12 railroads.

Larry specializes in exhibits and displays. He is curator of the Museum, now temporarily closed. Also, he has written many magazine articles and these books: *The Book of Rules for Model Railroading, What Makes a Steam Locomotive Go?* and *Fun With a Model Railroad,* all of them published by Penn Publishing Company, Ramsey, N.J., which issues *Model Railroad Craftsman,* a monthly magazine. Larry's first two books are out of print but the third is still available from the publishers at $1.

He also wrote *A Picture History of B&O Motive Power,* Simmond-Boardman Co., which may be obtained at $2.50 by writing the B&O Museum, Baltimore, Md.

THE TRANSFER from the Buffalo funeral car shown in our Oct. '58 issue is one of more than 14,000 old trolley transfers owned by Bill Gordon, 811 Carson Ave., Rochester, N. Y., author of several books on traction lines in western New York State and co-author of a recent history of the Fonda, Johnstown & Gloversville. These items came originally from the late Prescott McCartney, a Rochester traveling man who began collecting them in 1901. While on business trips Mr. McCartney would often take a trolley for only a block or two in order to get another transfer.

Elwood White, president, Vancouver Island Ry. Historical Ass'n, 3831 Merrian Drive, Victoria, B. C., Canada, writes: "For $1 we will send anyone an original 1930 map of Victoria showing all British Columbia Electric streetcar lines, photo of a BCE interurban, and a brochure on their lines. Use international postal money order, no stamps."

STEAM POWER

ONE road that still finds engines more suited to its purpose than diesels is the Bevier & Southern, which runs between Bevier, Mo., and a coal mine 16 miles to the south. The B&S is owned entirely by Mason County residents; has five steamers, 40 regular employes, and an annual payroll of $125,000.

"The Oregon Pacific & Eastern, a 30-mile freight line, has retired its last surviving steamer, a 2-6-2T, built by Baldwin in 1908," reports Pete Replinger, 927 Elinor St., Shelton, Wash. "The only Northern Pacific steam engine now running, so far as I know, is No. 1070 (0-6-0, Class L-9), leased to Simpson Logging Co. for switching at McCleary, Wash."

In use today: Shay No. 1925, Graham County RR., owned by Beeman Lumber Co., Robbinsville, N. C.; makes 13-mile run to Topton for connection with the Southern Ry. Another Shay, 1926, is being cannibalized for parts.

A group of three Georgia roads—the Wrightsville & Tennille, the Wadley Southern, and the Louisville & Wadley—now haul freight only, having discontinued passenger service last August. The W&T mixed train, almost the last steam-powered mixed train in the country, is no more. Regretably, no picture was taken of its final run. All three roads are dieselized.

Although the Nickel Plate has been fully dieselized since last Aug. 27 it has about 40 serviceable steamers stored at Conneaut, Cleveland, Bellevue, Brewster shops, Fort Wayne, and Chicago Division points.

Some make more, some less: F.E. DORAN reports:

$1050 gross in single MONTH in my own business

Start your own business!

Here's YOUR chance to start a money-making, year 'round business of *your own* and make the success you've dreamed about.

G. R. Adcock took in $102 in one day. O. W. Hare landed a $750 hotel job. J. S. Corbit grossed $279.50 his first month. Homes, hotels, offices, clubs, offer you big profit possibilities. Auto upholstering also.

NO SHOP OR OFFICE NECESSARY • You clean furniture on customers' premises. No hauling, no high rents. Supplies inexpensive; you operate from your own home. What you take in is mostly profit.

If you want to be your own boss—free from layoffs and strikes, we will help you to start and succeed. **This is not a lease proposition.** *You* own the machine, *you* work when and where *you* please and all the money *you* take in is *your own.*

Mail Coupon Today for FREE Book

VON SCHRADER MFG. CO.
247 "D" Pl., Racine, Wisconsin
Without obligation rush your **FREE** booklet about how I can start my own permanent and profitable electric Upholstery Cleaning business.

Name_____

Address_____

City_____ Zone____ State_____

HYDRAULIC JACK REPAIRS
Earn While You Learn at Home

Millions of jacks in gas & auto-service stations, truckers, body-shops, riggers, factories, farms need servicing. We show you HOW—easy step by step directions—what tools to use. EARN UP TO $5 an hour, in spare time, in your own basement or garage. Start your own business NOW. Write for folder No. 14-1 & free bonus offer.
Institute of Hydraulic Jack Repair
P.O. Box 50, Bloomfield, N. J.

POEMS WANTED for musical setting and recording. Send poems. Free Examination.
AMERICA'S LARGEST SONG STUDIO
FIVE STAR MUSIC MASTERS, 620 BEACON BLDG. BOSTON, MASS.

OIL IS WEALTH
Oil leases could make you rich!
Rental on 40 Acres only $20 per yr.
Now available in potential boom area.
Licensed Oil Broker. Write for free Map.
GREAT WESTERN PETROLEUM CO.
1623 Fremont St., Las Vegas, Nevada

Law!
STUDY AT HOME
We guide you step by step—furnish all text material, including 14-volume Law Library. Training prepared by leading law professors and given by members of the bar. Degree of LL.B. Low cost, easy terms. Send for valuable Free Book, "Law Training for Leadership," *today.*
LaSalle Extension University, A Correspondence Institution **Dept. 159L Chicago 5, Ill.**

75 POWER NEW! TELESCOPE 25X-45X-75X $3.98

Three in one telescope, 3 variable 25X-45X-75X magnification. Brass bound, 25 power for ultra bright images 45 and 75 power for long range. Guaranteed to bring distant stars, moons, objects, sports events 75 times closer.

Most powerful scope sold anywhere near this amazing low price. American made, 5 sections. Opens 36", closes 1 ft.; contains 4 ground & polished lenses. Can also be used as powerful compound microscope. Mass production enables us to offer telescope complete at $3.98 postpaid. Money back guarantee.

CRITERION CO., Dept. EAB-37 • 331 CHURCH STREET, HARTFORD, CONN.

SONGWRITERS

LARGE RECORDING COMPANY WANTS NEW SONGS! Your song may be chosen for recording on ROYALTY BASIS. NATIONAL SALES, PROMOTION, DISTRIBUTION if selected. Send songs, song poems for FREE examination. NO CHARGE FOR MELODIES.

MUSIC MAKERS, Dept. AM-19 Box 2507, HOLLYWOOD, CALIF.

Inventors

Send today for our instructive booklet, "Patent Protection for Inventors" outlining preliminary steps to take toward patent protection, also for convenient "Evidence of Invention" form.

VICTOR J. EVANS & CO.
500-B MERLIN BUILDING, WASHINGTON 6, D.C.

Locomotives of the Jersey Central

History and development 1839 to date. 83 pages, 84 illustrations. Complete all time rosters show all rebuilding and renumbering—$2.50.

WARREN B. CRATER
270 W. Colfax Ave. Roselle Park, N. J.

the amazing
SPIL-PRUF TRAY
is your answer!

Now at last, the perfect tray!

***Liquids won't spill**
***Carried with one hand**
***Practical and Decorative**

If you have a gift problem, the Spil-Pruf tray is the happy answer for both men and women. (You'll never part with it once you've seen it so we suggest you order an extra one for yourself!) It is ideal for the amateur bartender and every hostess will recognize its endless virtues. No more spilling on rugs or floors even if you swing and sway it. One hand is always free to open doors or to carry other things. When it is not in use it folds up and can be used as a wall decoration or stored compactly away. Can be used for glasses, cups, mugs, deep dishes, etc. Has brass wire frame, cork liner; in black or red, $4.50; in copper, $5.75. Add 25 cents for postage, 50 cents west of the Mississippi. Sorry, no COD's.

QUALITY BAZAAR, Box 683
Grand Central Station, N. Y. 17

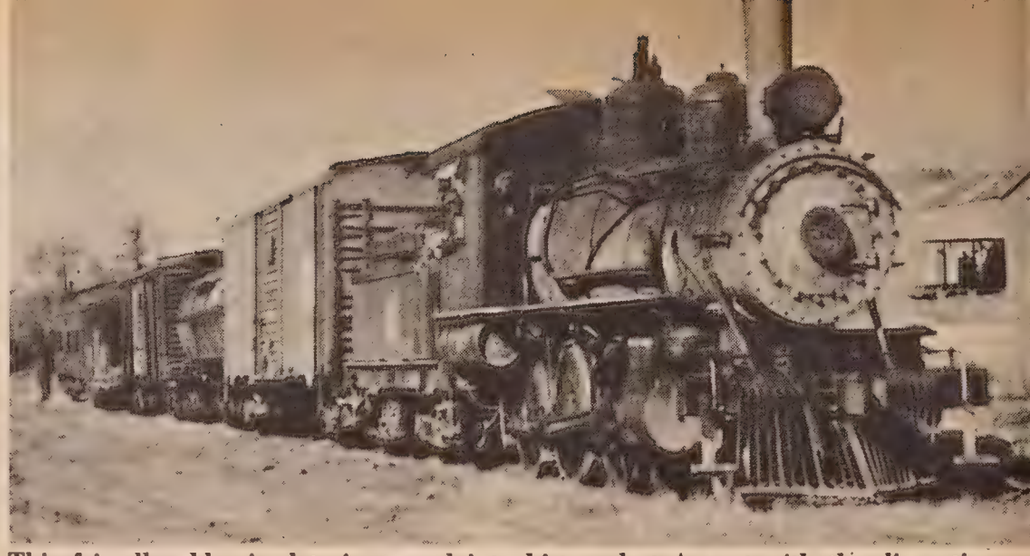
Please send me..... Enclosed

$.....in full payment, including postage.

NAME.....

ADDRESS.....

CITY.....ZONE.....STATE.....



This friendly old mixed train passed into history last August with the discontinuance of passenger service on the ten-mile Louisville & Wadley, down in Georgia. W. F. Armstrong, 163 Avon, Elmhurst, Ill.

The 0-6-0 *Stephenson*, one of Great Britain's oldest working locos, built by Robert Stephenson at Newcastle-on-Tyne in 1896, was scrapped recently. Railfans from far and wide paid farewell visits while she was waiting for the blow-torch at Irthlingborough Ironstone Mines. The Industrial Locomotive Society, asked for her nameplate.

Dennis B. B. Thompson, Confusion Hill, Pircy, Calif., reports: "We have just built a unique amusement-type railroad here on U. S. Highway 101, 200 miles north of San Francisco. Our train runs from Confusion Hill up three switchbacks on 5 to 6 percent grades to a hilltop, 170 feet above our parking lot. There it crosses the hill, runs along a small canyon rim, makes a loop, and returns via the same track. Round trip, 1½ miles, was designed as an adult tour of a forest of giant redwoods."

Mr. Thompson saw the following steamers on a recent trip through Washington:

Skagit River Ry. 2-6-2 on display at New Halem. (Line abandoned in 1954.)

Northern Pacific at Seattle: 2461 (2-6-2), 1132 (0-6-0), 2601, 2626 (4-8-4's), and others. NP also has some steam at Tacoma and Auburn.

Rayonier, Inc., railroad camp 14 miles north of Hoquiam, had ex-Folsom Logging Co. loco 45 (2-6-2) on display and No. 101 (2-8-2) set aside for scrapping.

These are operating: Nos. 2 and 70 (2-8-2's), 110 and 111 (2-6-6-2T's), 14 (2-6-6-2), 90 (2-8-2), and 38, bought from Sierra Ry.

About 20 miles north of camp they have a 3-spot Shay on display. They sold two Shays recently to the Georgia Pacific at Arcata, Calif.

The Burlington has 4-6-4's, 2-8-2's, 4-8-4's, 4-6-2's, and 4-6-0's stored at Galesburg and Centralia, Ill., and Lincoln, Neb., but no steam operating nor even in stand-by service . . . The Atlanta & West Point has donated a Pacific type to the City of Atlanta, Ga., for permanent display . . . Pennsy has some 2-8-0's, 2-10-0's, 4-10-4's, and 0-6-0's stored at Altoona . . . Latest

Stephen D. Maguire, 1411 River Road, Belmar, N. J.

Chicago Transit Authority car No. 6, probably the best preserved of all U.S. Mail trolley cars, was photographed last May at Vincennes barn on CERA fantrip.

news of DM&IR and Union Pacific steam power appears on page 34.

"I never enjoyed fantrips more than I did those sponsored by the National Railway Historical Society over CPR and CNR out of Toronto on Labor Day week-end," says Jack Emerick, 200 South Terrace, Boonton, N. J. "We had steam power on both trips and were permitted to ride the engines, something practically unheard-of in U. S."

The following data comes from Burdell Bulgrin, Owen, Wis.: The Soo Line still has 11 steam engines on its roster: 451, 471, 472 (all 2-8-0's); 730, 736, 2719 (all 4-6-2's), and 1002, 1011, 102, 1017, 1025 (all 2-8-2's), all stored at Gladstone, Mich., and Shoreham, Minn.

In Chicago, the Illinois Sand & Ballast Co. has an 0-4-0T but hasn't used her in years. The Indian Hill & Iron Range has an 0-8-0 plus 0-8-0 No. 900 leased from the Baltimore & Ohio Chicago Terminal, using one at a time.

Washington, D. C., has 3 steam engines in regular service, reports Herman H. Diers, 4722 Chesapeake St., N.W. Washington. Two are fireless types operated by Potomac Electric Power Co.: one at Benning plant, replacing an electric loco, the other at the Buzzard Point plant. The third is Health, Education & Welfare loco No. 4, burning coal, operates on a short stretch of track between the St. Elizabeth's Hospital heating plant and a B&O siding near Bolling Field. There is also a "fireless cooker" at the Alexandria, Va., power plant.

A list of B&O steam engines stored as of last July 1 may be obtained free by writing Wm. H. Schmidt, Jr., Director of Public Relations, B&O Railroad, 1202 B&O Bldg., Baltimore 1, Md. The list includes 129 steamers (8-8-0 switchers, 2-8-2's, 2-10-2's, 4-8-2's and 2-8-8-4 Articulateds), with none actually in operation except 4 switchers on the B&OCT.

A complete record of all steam engines built by Montreal Locomotive Works, including all builder's numbers, is owned by James W. Kerr, 7439 Birnam St., Montreal, Canada. He also has an almost comprehensive list of those built by Canadian Locomotive Co. over a 50-year period, and many photos of engines from both companies.

Three steam recordings of better-than-average quality are *Denver & Rio Grande Western* and *The Silvertown Train* and *Baltimore & Ohio*, all 10-inch LP disks issued by Wm. Steventon, Railroad Record Club, Hawkins, Wis.: $4 to members, $4.25 to non-members. The first features 3-foot-page Mikes trundling 14 cars through Cumbres Pass. Recording was made from a caboose coupled behind hwlpwr engine 486. Second is a saga of D&RGW 476 on the slim-gage Durango-Silverton run. Third is B&O 1635, an 0-8-0 switcher assembling a train at Painesville, O., and No. 7609, a huge 2-6-6-4, gets into the act. The result is a lasting memory of the Lake branch.

RAILROADIANA

ITEMS are printed here free, in good faith but without guarantee. Keep your wordage under 28, except for entries dealing with old issues of our magazine. Use abbreviations such as *tts.* (public timetables) and *emp. tts.* (employes' operating timetables.)

If you wish to be listed as desiring pen pals, state your interest.

Address Sy Reich, *Railroad Magazine*, 205 East 42nd Street, New York 17, N. Y.

SWITCH LIST

JOHN AARDEMA, 114 16 Ave., Paterson, N. J., wants pix 5x7, pc. Interstate 4,7,14,21,25,27,28, Vgn. and Clinchfield diesels. Also Interurban lists.

LAD AREND, 13 High, Franklin, O., wants pix Big Four 133, 245, 258, 615; LE&W 102, FWC&L 23.

DON AUSTIN, N. Main St., Troy, N. H., buys, sells, trades tts., tokens, transfers. Answers all mail.

E. C. M. BORDEN, 185 Cedar St., New Bedford, Mass., wants 8mm movies Union St. Ry. trolleys.

P. A. BISSELL, 15 Belair Rd., Wellesley, Mass., selling Railroad Magazine from '33, Trains from No. 1. Has lists pix, bks, tts, passes.

BOB BRENDEL, 1305 Bruce Rd., Oreland, Pa., buys pix, negs. any size Reading steam.

W. BROSCHART, 243-20 Superior Rd., Bellerose, N. Y., sells size 616 pix rrs., trolleys, taken in '20's, '30's. Old Railroad Magazines, NRHS Bulletins, 1940 to date, 25c ea.

W. Y. BROWN, R., Box 722, Rome, Ga., sells, trades, tts., tr. orders, SR wires, railroadiana. List for 4c stamp.

DICK BRUNDAGE, JR., 60 Post St., Yonkers, N. Y., wants pix NYC, Pullmans, last Putnam Div. train; also tr. orders.

C. BYCROFT, 115¼ Douglas, Los Angeles, Calif., trades, sells west, Midwest trolley, steam, diesel pix. Wants steam, trolley negs.

BURDELL BULGRIN, Owen, Wis., wants any size pix taken from loco cab showing part of boiler or window frame. Also cab interiors, steam, diesel.

JOHN BUTLER (age 14), 19 Allen St., Augusta, Maine, wants pen pals, either engrs. or boys who'd like to become engrs.

HENRY CHILDERS, Box 145, Union Mills, Ind., will sell 175 emp. tts. from 25 roads to top bidder.

JOHN COOSHEK, 4418 Ontario St., Vancouver, B. C., Canada. Trains, bound Vols. 1, 2, good cond.; make offer. Also tts., emp. tts., mostly Canadian.

I'll Send You This Handsome SAMPLE CASE FREE

MAKE UP TO $30.00 IN A DAY!

You can make plenty of EXTRA CASH for yourself, in spare time or full time, with this big, valuable, FREE tailoring Sample Case packed with 100 beautiful, big-value suit and overcoat samples. Just show the samples and last-minute styles to friends, fellow-workers, others. Take their orders for fine made-to-measure clothes—and pocket BIG CASH PROFITS in advance. No experience, no tailoring knowledge needed—and no money needed, ever. We supply everything FREE—sample case, sample suitings, equipment, instructions. Start making money first day!

Your Personal Suits without 1¢ Cost!

When men see the fine fit, quality and value of our suits—THEY ORDER! So we make it easy for you to get your own personal suits and overcoats without paying even one penny. Don't wait! Rush the coupon below with your name, address, and age for your FREE SAMPLE CASE—Today!

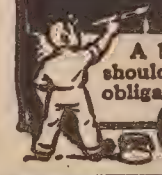
W. Z. GIBSON, INC., Dept. K-406
500 S. Throop Street • Chicago 7, Ill.

W. Z. GIBSON, INC., Dept. K-406
500 S. Throop Street, Chicago 7, Illinois
Please rush ABSOLUTELY FREE the valuable Sample Case with suit fabrics and style display. Include instructions, money-making plans and details for getting my own suits without paying one cent.
Name.....Age.....
Address.....
City.....State.....

YOUR BOOK CAN BE PUBLISHED!
Our high royalty—low subsidy complete program can help you join Comet's list of widely recognized and successful authors. Send for *FREE* copy of *How To Publish Your Book.*
COMET PRESS BOOKS
Dept. AM-2 200 Varick St., N.Y.14

POEMS WANTED
For musical setting . . . send Poems today. Any subject. Immediate consideration. Phonograph records made.
CROWN MUSIC CO., 49 W. 32 St., Studio 747, N.Y. 1

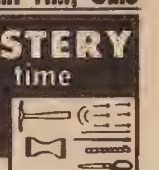
How to Make Money with Simple Cartoons



A book everyone who likes to draw should have. It is free; no obligation. Simply address FREE BOOK
CARTOONISTS' EXCHANGE
Dept. 982 Pleasant Hill, Ohio

LEARN UPHOLSTERY in your spare time
run your own business AT HOME

FREE BOOK
SAMPLE LESSON
WITH COURSE YOU MAKE
SLIPPER CHAIR
CLUB CHAIR
OTTOMAN
PLUS SLIP COVERS



BE YOUR OWN BOSS
Earn more from the start! Set up your own profitable business AT HOME. Enjoy steady income, independence in booming Custom Furniture Upholstery.
Right off you start working with tools, complete frames, fabrics, and materials, included FREE. Learn professional custom upholstery, reupholstery, furniture finishing, repairs. Make beautiful slip covers, window cornices, cushions and draperies. EARN WHILE YOU LEARN, in spare time . . . the UTS easy way.
FREE Illustrated Book—Sample Lesson
Get ready for well-paid job, big profits as your own boss in good times and bad. Write today for FREE Book with sample lesson. No obligation—Training in N. Y. School also available. APPROVED FOR VETERANS.
UPHOLSTERY TRADES SCHOOL
Dept. HA-2810, 721 B'way, N. Y. 3

BORROW By Air Mail!

ANY AMOUNT $100 to $600

If bills are piling up and you need cash at once... an Air Mail Cash Loan from Postal can be a real lifesaver! It's fast! It's completely private and confidential. Your friends, relatives, employer will know nothing about your application. Old, established, state-licensed firm. No endorsers required. Take up to 24 full months to repay on terms to fit your budget. Rush coupon below for complete Loan Papers and information FREE in plain, sealed envelope (sent Air Mail). 15-day Free Trial Guarantee. No agent will call. Write to:

POSTAL FINANCE CO., Dept. 930A
374 New Brotherhood Bldg.,
Kansas City 1, Kansas
Rush FREE Confidential Loan Papers.

FREE AIR MAIL

Name _____

Address _____

City _____ *Zone* ____ *State* _____

PEE WEE BATTERYLESS TUBELESS **LIFETIME RADIO**

REALLY WORKS—FOR LIFE! WITHOUT TUBES, BATTERIES OR ELECTRICAL PLUG-INS. Never runs down. SMALLER THAN A PACK OF CIGARETTES! GUARANTEED TO RECEIVE LOCAL RADIO STATIONS ANYTIME—ANYWHERE YOU GO! Sensational new Ferrite Selective Tuner—Perma-Crystal diode. Super SPEAKER-PHONE. Durable black and gold plastic case.

Send only $2.00 (bill, ck, mo) and pay postman $4.99 COD on arrival or send $6.99 for postpaid delivery. SENT COMPLETE READY TO LISTEN WITH LIFETIME GUARANTEE. Nothing extra to buy—ever. Available only from: **MIDWAY CO., Dept. WA-2, Kearney, Nebr.**

Tells How You Can Learn to MOUNT BIRDS!

Learn At Home

Men, Boys, Hunters, Fishermen, **mount** and **save** your lovely wild-game **trophies**. Be a **Taxidermist**. Mount **Birds, Animals, Heads, Fish, Tan** skins. **YOU** learn easily, quickly in **spare time**. Have a grand **home-museum**. The finest and the greatest **hobby known**, for sportsmen. **Fun, real profits.**

FREE BOOK

Yes, **FREE**. Beautiful **strange, valuable Book**, telling **all** about Taxidermy. Contains over **100** beautiful game-pictures. And it's yours **FREE**, if you rush your request. You can mount **all kinds of wild-game**, and common specimens too. We can positively **TEACH YOU**. So **GRASP** this opportunity. **RUSH** letter or postal for this amazing **FREE BOOK**. Don't delay. State your **AGE**.

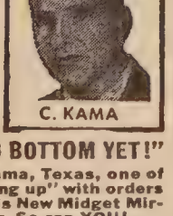
N. W. SCHOOL OF TAXIDERMY, 4202 Elwood Bldg., Omaha 2, Neb.

INVENTORS

Learn how to protect your invention. "Patent Guide" containing information on patent protection and procedure with "Record of Invention" form will be forwarded to you upon request—without obligation.

CLARENCE A. O'BRIEN & HARVEY JACOBSON
Registered Patent Attorneys
Dept. 926-B, District National Building
Washington 5, D. C.

"I'M MAKING MORE THAN $1000 a Month


C. KAMA

HAVEN'T TOUCHED BOTTOM YET!"

—reports Charles Kama, Texas, one of many who are "cleaning up" with orders for PRESTO. Science's New Midget Miracle Fire Extinguisher. So can YOU!

Amazing ***new*** kind of fire extinguisher. Tiny "Presto" does job of bulky extinguishers that cost 4 times as much, are 8 times as heavy. Ends fires fast as 2 seconds. Never corrodes. **Guaranteed for 20 years! Over 2 million sold! Sells for only $4.95.**

Show it to civil defense workers, owners of homes, cars, boats, farms, etc., and to stores for re-sale—make good income. H. J. Kerr reports $20 a day. Wm. Wydallis $15.20 an hour. FREE Sales Kit. No obligation.

MERLITE INDUSTRIES, Dept. P235
PRESTO DIV., 114 East 32 St., New York 16, N.Y.
***Canada:* Mopa Co., Ltd., 371 Dowd St., Montreal 1, P.Q.**

L. U. CIAPPONI, 1514 98 Ave., Oakland, Calif., will trade size 616 negs. Mississippian Ry., Mobile & Gulf, Angelina & Neches, etc., for other steam short lines.

DOUG CUMMINGS, 8070 Oak St., Vancouver, B. C., Canada, sells, trades size 116 negs., pix, 35mm color slides, steam, elec., U.S., Canada. List, sample 25c, refundable.

OWEN DAVIES, 1214 LaSalle St., Chicago, Ill. sells back issues of Railroad Magazine, much railroadiana. Big list free if you specify your interest.

ED DeVITO, c/o F. M. H. Harris, Hoerle Blvd., Torrington, Conn., wants negs., pix NE rrs. esp. short lines such as Union Frt., G&U.

PEYTON DIXON, 200 Yeardley Ave., Lynchburg, Va., wants pix, negs., size 616 or bigger, steam locos, steamships, esp. oldtimers. Sell or trade.

PAT DYSOM, 100H S. Western Ave., Champaign, Ill., buys PRR pix, cars, engines, structures pre '15.

WAYNE ELLIS, 145 Scenic Rd., Springfield, Pa., sells PRR bklt. "Broadway Ltd.," 25th Anniv. 1927, 47 pages, 26 illus., $2 postpaid. PRR list for 4c stamp.

DON ETTER, 7565 Willis Rd., Willis, Mont., will buy size 616 negs. CNR suburban locos and 4100, 4200, 4300 classes; CPR 5700's, 5800's, 5900's.

G. J. FALTICO, 3130 W. Rosamond, Spokane, Wash., buys ,sells, trades Northern Western rr. pix. List for 4c stamp.

JASON FANE, 80 Midwood St., Brooklyn, N. Y., sells, trades elec. rr. and rap. transit pix, negs., info. List free.

JACK FARLEY, 1907 5 Ave., San Rafael, Calif., buys plates, negs., pix NWP, NPC, SF&NP.

O. B. FLINCHPAUGH, JR., 3426 Cheviot Ave., Cincinnati, O., sells size 116 steam negs., pix NYC, Pennsy, B&O, NEW, etc. Has pix T&R, T&G; send for list.

PETE GARY, Box 635, Pardee Hall, Case Institute, 10900 Euclid Ave., Cleveland, O., wants pix, negs., any size, B&O 202, 214, 216, 218, 219, 221, 223, 1751.

TED GAY, 6 Northview Dr., Morris Plains, N. J., sells size 116 and pc. steam negs. Will buy 8mm original movies.

GENE GLENDINNING, 11455 73rd Pl., LaGrange, Ill., sells railroadiana or trades for tr. orders, Beebe's "Mixed Train Daily." List for 4c stamp. Asks, "Is there a club specializing in tr. orders?"

F. A. GUIDO, Box 668, San Mateo, Calif., publishes informative railfan monthly, Western Railroader, sample copy 10c.

FRIT HARDENORF, 4298 Shenandoah Dr., Dayton, O., buys any size pix Lake Shore Elec. frt. and pass. cars.

GRAHAME HARDY, Carson City, Nev., buys and sells old issues Railroad Magazine, other railroadiana. Big list free.

ED HARPER, JR., Box 1307, Nashville, Tenn., buys steam, pass. car pix AA, GR&I.

GEO. HARRIS, Lower Maple St., Hudson Falls, N. Y., will swap clear pc. pix Eastern shortline steam for diesels of same road. List free.

BRUCE HAVENS, 101 W. Lincoln St., Media, Pa., sells 4x5 pix PTC, PSTC, QBRR. List free. Wants pix PRT Rtes. 71, 77, South Penn. Trac.

JOHN HORVATH, 194 Munroe Falls Ave., Cuyahoga Falls, O., buys steam loco negs. B&O, DM&IR, NP. (Ed. asks, What size, John?)

RAY HIGGINS, 419½ Katahdin Ave., Millinocket, Maine, sells on approval pc. size pix BAR, MeC CPR, CNR, Maine n.g., etc.

L. G. HILL, Box 161, Washington, D. C., buys, sells, trades emp. tts. Sells railroadiana, elec. traction and transit material.

JOHN HOOK, 464 Cornelius Dr., Homewood, Ala., will sell 93 issues Railroad Magazine '40-'54, good cond., best offer.

TOM HURST, 3364 Washington St., San Francisco, Calif., buys, trades, sells switch keys, locks. Wants NECO, ST&E, PEP.

KEN INGMANSON, 1242 Juliet Ave., St. Paul, Minn., sells 3x4½ pix steam, diesel rrs. in Minn.

WALT JEHNERT, 3200 White Ave., Baltimore, Md., will sell 100 transfers from 75 companies, $1.

C. H. JOHNSTON, JR., Box 304, Conshohocken, Pa., will sell for best offer March '13 Railroad Magazine, fair cond., both covers, and March '18, no front cover, back loose. Send for list of others.

ARNOLD JOSEPH, 2512 Tratman Ave., New York, N. Y., sells back issues Railroad Magazine, other rr., model mags. Info. for stamped env.

G. M. KIDDER, RFD 1, South Acton, Mass., will sell Trains Album 18 (Chicago); wants 4 (Colorado).

JIM KERR, 7439 Birnam St., Montreal, Que., Canada, trades sells loco builders' pix.

SHELDEN KING, R.D. 3 (Magee), Waterloo, N. Y., sells "Trolley Pix of the Finger Lakes Region," 24 pages, 39 pix, map, 60c.

DON KISSICK, 36 Thompson St., Princeton, Ill., wants any size pix, negs., color negs. LVT, CA&E, Chi. Wentworth St. Quote price on compl. file Railroad Magazine to Dec. '54.

CHAS. KOCAN, 1426 Fairfield Ave., Lombard, Ill., buys any size negs. Michigan, Minnesota, Wisconsin lumber rrs. esp. Nahma & Nthn.

TOM KOPRIVA, 8805 S. Tulley, Oak Lawn, Ill., sells tts., U.S., Canada, Mexico, Gt. Britain, mostly since 1950. Send want list. Buys old CERA Bulletins.

AL LEA, 411 Prairie St., Stevens Pt., Wis., will trade GB&W loco pix for CMSP&P loco pix.

JOE LAPEUAZ, 39 Maltby Pl., New Haven, Conn., wants pc. views New Eng. trolleys. Will pay 50c ea. for those of Shore Line Elec. Ry.

R. D. MacARTHUR, Box 248, Yucaipa, Calif., sells railroadiana of Calif. logging rrs., esp. A&MR, ER&E; also Calif. RR Comm. reports.

JOHN MacLEAN, 542 Cranbrook Ave., Toronto, Ont., Canada, sells rr., trolley pix, color pix, slides, U.S., Canada, overseas. List free.

JOE McMILLAN, Box 941, Yorktown, Texas, wants MP, T&NO, Santa Fe, short lines tr. orders from Texas and La.

DON McQUEEN, 120 James St. E., Brockville, Ont., Canada, will buy neg., pix CNR 0-6-0 7134; also old rosters CNR, CV, GT, GTW, Can. Northern, Can. Govt., Intercolonial.

STEVE MAGUIRE, 1411 River Rd., Belmar, N. J., has 35mm color slides trolleys and rapid transit to trade or sell.

E. W. MAIER, 630 Marion Ave., Kalamazoo, Mich., custom-makes rr. motif tie clasps, cuff links, decorative plates, mugs, etc. Write for details.

JON MESSIER, 5714 Wren Ln., El Paso, Tex., will buy any size negs. Super Chief, El Capitan obs. cars.

M. D. MEYER, 238 W. Water St., Brillion, Wis., sells Milw. Elec. Ry. pass. int. pix.

AL MILLER, 3212 34 Ave. S., Minneapolis, Minn., will buy steam loco brass bell with cradle.

ALAN MILLER, 1836 Gardena Ave., Glendale, Calif., will pay top prices for loco. bldr.'s plates: Alco-Rhode Is., Alco-Dickson, Alco-Rogers, pre-Alco plates.

CHAS. MOCKBEE, 1573 Bauman Ave., Dayton, O., buys any size pix, tts. C&LE, IRR, FJ&G, CCT frt. motors. (Ed. says: Name of your avenue was hard to read. We hope we guessed it right.)

JOHN MOFFAT, Box 101, Oxford, N. Y., will buy tts., esp. UP 75th anniv. 1944.

STAN McCARTHY, 420 Boonville, Springfield, Mo., wants to hear from fans in nearby states eager to form NRHS chapter.

JOE M'MAHON, 15 Adrian Ave., New York, N. Y., sells pix, tts., NYNH&H, NYC, Off. Guides, Trains. List for 4c stamp.

TOM MOHR, 2050 W. Giddings St., Chicago, Ill., wants any size pix 4-4-2's CPR, WC, Sou., MP, UP.

W. R. MOODY, 268 King St. E., St. John, N. B., Canada, wants to hear from Don Lightbody regarding Canadian loco pix.

DAVE MULKINS, you gave no address.

BART NADEAU, 1205 37th Ave., San Francisco, Calif., sells 3½x5 pix S.F. Muni. st. cars 9 for $1.

DAVID NESYLE, Box 221, Milford, N. Y., has many old tickets, tts., rulebooks, other railroadiana from FJ&G gen. offices. List for 4c stamped env.

BOB O'FARRELL, 48 Avalon Rd., W. Roxbury, Mass,. buys any size steam negs.

RAY OLLILA, 716 Briar Pl., Chicago, Ill., wants sizes 620, 615 C&NW steam negs., OSSA steam negs., pix, buy or trade. Has steam, diesel negs. to swap.

HAROLD OLSEN, 921 Essex Ave., Linden, N. J., wants pix TB&PT Birney 41, MCT Birney 450 series. George Votava, please write.

C. D. PERRY (master carbldr. Seashore Elec. Ry. Museum), 533 Lincoln Rd., Walpole, Mass., wants many old issues Railroad Magazine, unclipped. Send for list.

KEITH PRATT, Bloomfield Station, Prince Edward Island, Canada, will buy Moody's book "Edaville RR."

NORMAN REINHARDT, 31 Yearance Ave., Clifton, N. J., wants any size negs. Jack Frost Sugar covered hopper cars, Erie steam, diesel, cabooses, other steam roads.

MERLE RICE, 5827 Fernwood Dr., Ft. Wayne, Ind., sells color slides steam, diesel, elec. List for 10c. Wants slides elec. of Salt Lake area, Iowa, La.

BOB RIDDLE, Box 543, Ft. Scott, Kan., sells size 8x10 pix Frisco 4-8-4 reconditioned for Sedalia fair. Also sells newspaper clippings.

G. RUCH, 3834 W. 105 St., Chicago, Ill., buys, sells, trades switch keys, emp. tts.

E. E. RISSELL, 101 Conant St., Danvers, Mass., wants various sizes B&M steam loco pix. Send list.

JOE SAITTA, 114-40 209th St., Cambria Hts., N.Y., will sell to top bidder 80-page book "Loco. 6000," pub. by Baldwin, 1928; 60 pix, diagrams., excel.

MARTIN SCHACHNE, 1125 University Ave., Bronx, N. Y., sells NYCTA night tts., also rapid transit, surface transfers.

ORVIS SCOTT, 400 W. Portal Ave., San Francisco, Calif., will sell one copy Galloway's "Interurban Trails"; other trolleyana, incl. pix. No list. State wants.

FRANK SEIFFERT, JR., Box 21, Orange, N. J., sells pix, steam, diesel, elec., trolleys. Either rr. or trolley list and 2 pix, 25c. Both lists, 3 pix, 40c.

JOHN SEYFARTH, 719 Ecton Rd., Akron, O., wants prices on slides CTA, CTS, TTC, CNS&M, CA&E, PR, MTA, LATL.

J. SHAFER, Box 84, Raymond, Iowa, seeks old catalogs steam engines, autos, binders, mowers, circus posters, watch fobs, rr. pix, passes. (Ed. asks: What kinds of rr. pix?)

AL SHARP, 100 Shennecossett Pkwy., Groton, Conn., sells tts. '14-'17, Off. Guide '52-'58. List of railroadiana for 20c.

WALT SIMMS, 612 S. Reid, Pampa, Tex., will buy green lantern globe. Trades rulebooks.

JOE SMITH, 304 Picker Ave., Wood Riv., Ill., sells Kodachrome slides DRG&W n.g. steam engines on display, scenes on abandoned Colo. rail lines. List free.

W. A. STEVENTON, Hawkins, Wis., will sell trolley controllers, ¼" scale Interstate 150 series interurban.

TOM STRAUSS, 673 Lowry Ave. N.E., Minneapolis, Minn., buys diesel pix CB&Q, MILW, L&N, ACL, SAL, D&RGW, DM&IR, WM, N&W, etc.

STAN STYLES, 19 W. 18th Ave., Vancouver, B.C., Canada, sells size 616 negs., pix, steam, diesel, elec., logging stations, rt.-of-way. enlarged, 35mm color slides.

ELMER SULZRT, 821 East Side Dr., Bloomington, Ind., will sell switch keys ($2 ea., 3 for $5), switch locks ($5 ea.), all postpaid; from aband. Evansville, Sub. & Newburgh steam, elec. ry.

C. B. SWOYER, Box 172, Eldred, Pa., will buy Feb. '56 Railroad Magazine, Apr. '46 Trains.

ED TYVIELL, 131 E. Duval St., Philadelphia, Pa., wants 35mm slides N&W 2300.

A. R. WARD, 71 Chadwick St., Paterson, N. J., wants pix Penna. trolley lines, NYO&W diesels. Exchanges pix up to jumbo size.

C. R. WATERMAN, 931 Burton St., S.E., Grand Rapids, Mich., swaps steam pix. (What size?) Will sell Nat. Geog. Mags. 1920-'56, 25 or 30c ea. plus 8c postage.

ED. WEISS, 455 Nohonani St., Honolulu, T. H., will buy Interurban Special 13, supp. 1-2.

MARVIN WEISS, Box 1, Metropolitan Sta., Brooklyn, N. Y., sells transfers, tokens. List for 4c stamp.

RAY WESTING, 6325 Hancock Ave., St. Louis, Missouri, will sell many back issues Railroad Magazine, Trains, Off. Guides. List for 4c stamp.

LELAND WHITSON, 474 Rauenswood Ave., Menlo Pk., Calif., buys elec. negs.; sells, trades elec. pix. State interests.

MODEL TRADING POST

LAD AREND, 13 High, Franklin, O., will sell O gage 3-rail two 4-4-0 locos and one B&O 4-6-0.

H. R. ASHLEY, 50 Saratoga Ave., Yonkers, N.Y., wants Ives 3245 or 3245R loco, any cond.

D. M. CHRISTISEN, Box 122, Columbia, Missouri, sells Railroad Magazine, Trains, old technical rr. books, model mags. List for 4c stamp.

RUS CHRISTENSEN, 157 Manor Pkwy., Rochester, N. Y., sells HO gage kits, built-up equip. List for 4c stamped env.

DOUG. HAUSTEIN, 94 Winans Ave., Cranford, N. J., will sell Lionel 3444 animated gon $5.50, 445 switch tower $4.75, 3356 horse-car set $9.50.

TOM HERLIHY, 51 Reliance St., Rochester, N.Y., has new HO and Lionel eqpmt. to sell at half cost.

JOE LEVY, 83 Lincoln Ave., Ardsley, N. Y., has steel trk., locos, cars to swap for st.-gage Li., AF, Ives Dorf., old cats.

C. KAY, 7363 South Shore Dr., Chicago, Ill., disbanding diesel layout, cost $2500, asking $1000 or swap for what? Send 4c stamped env. for info.

CASE KOWAL, 2300 W. 21st St., Chicago, Ill., wants Meccano sets, parts, manuals.

A. E. MILLER, 3212 34 Ave., So., Minneapolis, Minn., will buy Lionel std.-gage steam 5, 6, 7 orig. cond., complete; also Ives 1122, 1134, AF 4690-4696 with tenders.

JOE MOONEY, 206 Andover St., Wilkes-Barre, Pa., will sell OO and HO items. List. Also swap .172 new Lobaugh O gage steel rail for OO items.

J. J. MURRAY, 33-R Winthrop St., Rehoboth, Mass., will sell compl. park-size steam train, track. Pix, details $1 refundable.

O. A. PARRIS, 1019 13 St., Bremerton, Wash., will buy or trade for OO gage Scalecraft 4-6-2, 4-6-0 chassis, C&NW class H tender, Nason 4-4-0 chassis.

RAY PEARSON, 113 Sinclair Ave., Staten Island, N. Y., sells Lionel 027 locos, frt., pass. cars, track, transformer, access., HO gage trolley. List for 4c stamp.

MERLE RICE, 5827 Fernwood Dr., Ft. Wayne, Ind., sells Lionel O and O27 gage, AF st. and HO gage eqpmt. List for 4c stamp.

JOE SADUISKIS, 24 Memorial Dr., Salem, Mass., will sell Lionel O27 cars, locos, track, etc. List for 4c stamp.

BOB SCHMIDT, 1949 Lehigh St., Easton, Pa., will sell or trade Railroad Magazines, model mags., cats., books, tinplate. Wants O eqpmt. State needs or request list.

M. SCHIFFER, 70 S. 95th St., Brooklyn, N. Y., will sell Li. O gage elec.-type loco 256 with twin motors, like new, $155.

BEN SMITH, 265 Tompkins Ave., Brooklyn, N. Y., will sell Lionel std.-gage engines 381E, 392E, 390E, 408E, 402, 072 gage 763EW, 763EW, 227E, solid rail track, sws.

NICK TINO, Box 302, Kearny, N. J., sells model mags., compl. O gage layout. List for 4c stamp.

JAS. WALKER, 334 N. Harrison St., Knightstown, Ind., will buy back issues Lionel Mag., Elec. Trains, Toy Trains, Mod Rail'ers Digest, Min. Railroading. Write first. ●

STATEMENT OF OWNERSHIP

Statement required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946 (Title 39, United States Code, Section 233) showing the Ownership, Management, and Circulation of Railroad Magazine, published bi-monthly at Canton, Ohio, for October 1, 1958. 1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Henry Steeger, 205 East 42nd St., New York 17, New York. Editor, Freeman Hubbard, 205 East 42nd St., New York 17, New York. Managing editor, none. Business manager, none. 2. The owner is Popular Publications, Inc., 205 East 42nd St., New York 17, New York. Henry Steeger, 205 East 42nd St., New York 17, New York. Shirley M. Steeger, 205 East 42nd St., New York 17, New York. 3. The known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: none. 4. Paragraphs 2 and 3 include, in cases where the stockholders or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees hold stock and securities in a capacity other than that of a bona fide owner. Signed, Henry Steeger, Publisher. Sworn to and subscribed before me this 16th day of September, 1958. Eva M. Walker, Notary Public, State of New York. Qualified, in New York County, No. 31-9506600. Certificate filed with N. Y. Co. Reg. Commission expires March 30, 1960. (Seal)—Form 3526—Rev. 8-50.

SAVE 75% ON WORK CLOTHES!

Terrific values you've got to see to believe!

SHIRTS 4 for $2.99 79c

Made to sell for 2.99. Now, 4 for the price of one! Tho used, sterilized and ready for long, tough wear! In blue, tan or green. *Send neck size, 1st and 2nd color choice.*

PANTS to match

Sold for 3.85, now only..... 99c

Send waist measure and inside leg length. 4 for $3.75

COVERALLS . . . wear 'em used and save plenty! Were 6.95, now $2.29

Send chest measurement. 3 for $6.75

MONEY BACK GUARANTEE . . . if not satisfied. Order TODAY! Send $1.00 deposit on C.O.D. orders. Add 25c for postage on prepaid orders.

GALCO SALES CO. Dept. 401

7120 Harvard Ave. • Cleveland 5, Ohio

"PSYCHIC DOMINANCE"

How to RULE OTHERS with your THOUGHTS." Full course—with stirring exercises. (ADULTS): $3. NO C.O.D. Satisfaction or refund. CLARION, 846-N Sunnyside Ave., Chicago 40, Ill.

"HYPNOTIZE

With ONE WORD, ONE FINGERSNAP," on stage.....$2. Sat. or ref'd. Hypnomaster, 846-N S'nyside, Chicago 40

COBRA

Self-Defence Street-Fighting Tricks." Designed to help peaceful adults. $2. These are vicious days. GAUCHO, 846-N Sunnyside Ave., Chicago 40, Ill.

WHERE'S YOUR BADGE!

OFFICIAL SPREAD EAGLE SHIELDS

NICKEL AND GOLD

A quick flash of one of these gleaming official-looking metal badges instantly shows who has the power! Finest quality with reinforced backs and pins for heavy duty. Available in standard size.

ONLY $1.98 POSTPAID

Or Miniature $1.25 POSTPAID

Your Choice: Special Officer, Private Watchman, Deputy Sheriff, Constable, Watchman, Sheriff, Special Deputy Sheriff, Police, Special Police, Private Detective, Special Investigator.

Also Available: 6 shot, 22 cal. Blank Automatic — $7.95, Holster, $3.50, Police Handcuffs—$9.50, Cuff Case—$3.50. Send 10c for Bargain Catalog.

FREE!! For limited time only, authentic Badge Carrying Case FREE with each order.

BIG THREE ENT., INC. 1109 Sixth Avenue, New York 36, N. Y., Dept. AG-1

LAW FREE BOOK THE LAW TRAINED MAN

Write today for a FREE copy of illustrated law book, "THE LAW-TRAINED MAN," which shows how to earn the professional Bachelor of Laws (LL.B.) degree through home study of the famous Blackstone Law Course: Books and lessons provided. Moderate cost; easy terms. Write now.

Blackstone School of Law, 307 N. Michigan Ave.

Founded 1890 Dept. 421, Chicago 1, Illinois

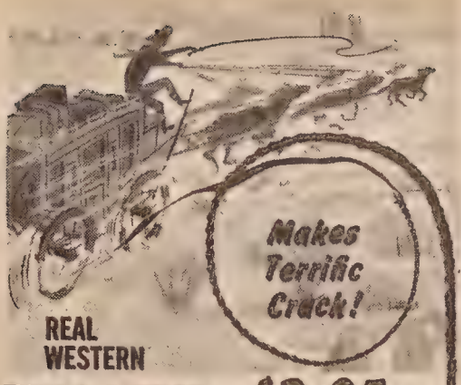
EAR NOISES relieved!

. . . such results reported by thousands! SEND TODAY for proof of how many found good hearing and relief from those miserable ear noises, caused by catarrh of the head! That's what these men and women (many past 70) reported after using our simple Elmo Palliative HOME TREATMENT! It may be the answer to your prayers. Absolutely NOTHING TO WEAR! You, too, may enjoy good results like thousands have reported, during our past 20 years, if you suffer with such conditions. Write today for PROOF OF RELIEF and WONDERFUL OFFER OF 30 DAY TREATMENT ON TRIAL! Send NO MONEY . . . pay ONLY if helped!

THE ELMO COMPANY

Dept. 9AD2 DAVENPORT, IOWA

Men's Mart



REAL WESTERN

BULL WHIP... $2.95 ppd.

This authentic bull-whip is handmade by Cherokee Indian craftsmen and is the same whip made years ago for Western Wagonmasters and Teamsters. Flick of the wrist makes this 6 foot monster "crack" with terrific noise. Of top grade calf leather, 8-plaited, has wooden handle. Measures 6 ft. overall. Only $2.95 postpaid. Send cash, check or M.O. Sorry no C.O.D.'s. **10-day money back guarantee**

SEAPORT TRADERS, INC.
Dept. AG-1 409 E. 12th St., Los Angeles 15, California

BLACK BEAUTY
Italian Stiletto

IMPORTED FROM ITALY
This collector's "PRIZE" is famous on the continent for its lightning speed in desperate hunting and fishing emergencies. It is faithfully trusted by sportsmen all over Europe

2 SIZES WHEN OPEN

Looks Sharp! Stays Sharp! . . . OPENS EVERY TIME! This precision-engineered New BLACK BEAUTY is not a switch-blade knife. It's GUARANTEED to open every single time. No idle seconds lost . . . no messy buttons . . . no broken springs. Open blade locks into position with a clicking sound. Easy to handle. Razor-sharp cutting edge. ACT NOW. Send M.O., check or cash. SAVE—buy both sizes for only $8.75. Refund in 5 days if not thrilled. Florida residents add 3%.

3½ in. $4.70 7 in. $4.95

FLORIDA IMPORTS, DEPT. 11-A, Green Cove Springs, Florida

***NEW* Vest Pocket .22 . . . $12.95**

Brand new 1959 Model 6-shot German revolver that sells in the $28-34 range. A tight, accurate well-made piece. 2½" Bbl., 5" overall. Fires popular Winch., Rem., Western, Peters .22 short ammo. Features side gate loading, screw-in ejector rod. Has steel rifled barrel with blade front sight. Excel. for target, plinking or defense. 10-day money back guar. Only $12.95 COD's require $6.50 deposit. Leather holster $2.25. Shipped FOB, Los Angeles express charges collect. Send cash, check or M.O. Calif. res. add 4% state tax.

SEAPORT TRADERS, INC., Dept. AG-12
409 E. 12th St., Los Angeles 15, Calif.

DON'T PULL HAIR FROM NOSE
May Cause Fatal Infection

Use the Hollis **KLIPETTE** *Rotating Scissors*

REG. U.S. PAT. OFF.

You can cause serious infection by pulling hair from nose. Ordinary scissors are also dangerous and impracticable. No better way to remove hair from nose and ears than with KLIPETTE. Smooth gentle, safe, efficient. Rounded points can't cut or prick skin.

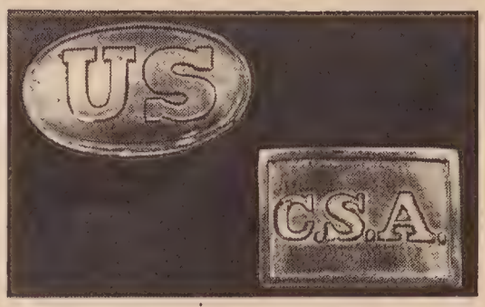
So Simple! Just turn end. Surplus hair comes out easily, gently.

$1 Made from fine surgical steel. Chromium plated.

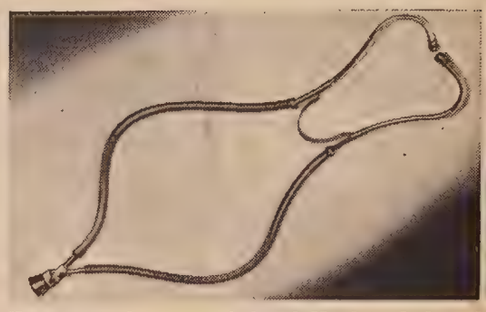
Guaranteed to Satisfy or Money Back

HOLLIS CO., 1133 B'way., N.Y. 10, N.Y., Dept. N-127
Enclosed is $1.00 for KLIPETTE. If I am not entirely satisfied, I may return it within 10 days for refund.

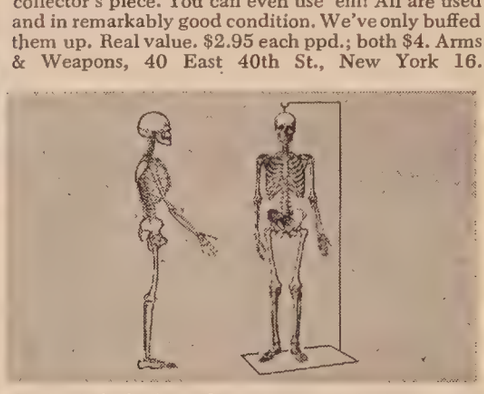
Name.....Address.....



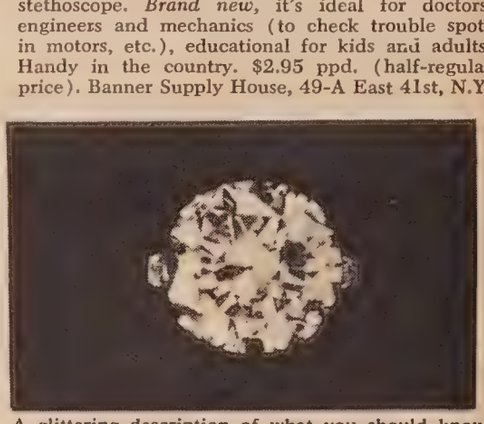
Look closely and you'll recognize the Confederate and U. S. Army initials on these Civil War brass belt buckles. These are the real thing and make a unique collector's piece. You can even use 'em! All are used and in remarkably good condition. We've only buffed them up. Real value. $2.95 each ppd.; both $4. Arms & Weapons, 40 East 40th St., New York 16.



Ever try to buy one of these? Hard to find, and usually expensive, this is a U. S. Medical Corps stethoscope. *Brand new*, it's ideal for doctors, engineers and mechanics (to check trouble spots in motors, etc.), educational for kids and adults. Handy in the country. $2.95 ppd. (half-regular price). Banner Supply House, 49-A East 41st, N.Y.



Precise 1-ft. high working scale model of a human skeleton is perfectly articulated, anatomically accurate. Fine for doctors, students, etc.; fun for office, den, club; (And what a gag!—"ideal" business partner; car ornament). Parts interlock, snap together. With chart, wire stand, $3.95 ppd. Chabon Scientific, 411-B Lincoln Bldg., N. Y. 17.

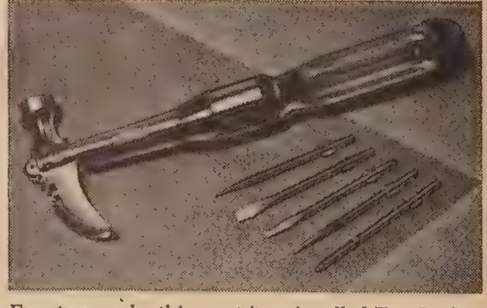


A glittering description of what you should know about diamonds is in one great catalog. You'll learn all about diamond-grading—even get advice which may save lots of money. Pictures of diamond rings, pins, bracelets. Prices range from $25 to $5,000. Catalog is free. Write to: Kaskel's, Dept. 878-L, 41 W. 57th St., New York 19, N. Y.

Thirteen-piece set is detailed replica of famous B & O passenger train. Safe and easy to run, flashlight batteries are housed in "diesel" engine which has stop, forward and reverse controls. Set has engine, two cars, 10 sections of standard-gauge track which make up 4-ft. oval. Mighty nice, $4.95 ppd. Madison House, 305 Madison Ave., N. Y. 17.

Identify yourself, sir! Personalized sportsman's cartoon labels for checks, letters, identifying equipment, etc. Choose from eye-catching hunting, fishing, boating, bowling and golfing scenes. Personalized from any 4 lines. 500 printed gummed labels with one of above cartoons. Comes in plastic case for $2 ppd. Bolind, Montrose 97, California.

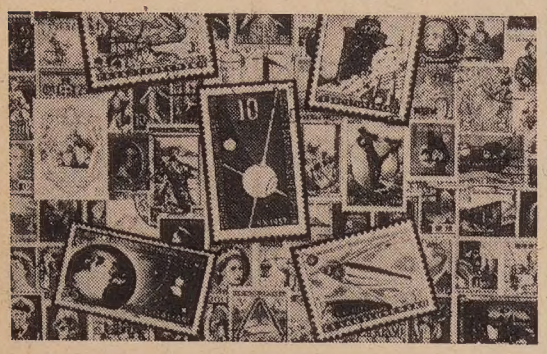
Let's face it, the whole family will want one of these appealing Patchwork Shirts. No two alike. With button-down collar, short sleeves, pearl buttons. Completely washable. Great for any time of the year. Sizes: small, medium, large. Useful and so much fun to wear. $3.95 ppd. Clever Patchwork cap is $2.50. Gayle's, Dept. AM, 440 W. 24th, N.Y.



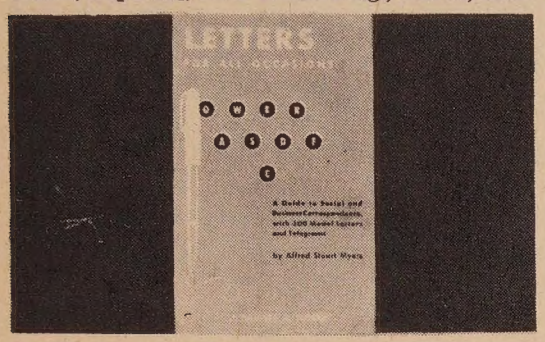
Easy to see why this great item is called Ten-In-One Hammer. Use as hammer, tack lifter, glass cutter, glass breaker, 4-mm. screw driver, awl, reamer, 2-mm. screw driver and gimlet. As if this weren't enough, detachable handle holds all these tools. Free knife catalogue is included, too! $2.98. ppd. Florida Imports, Dept. 7X, Green Cove Springs, Fla.

SHOP BY MAIL

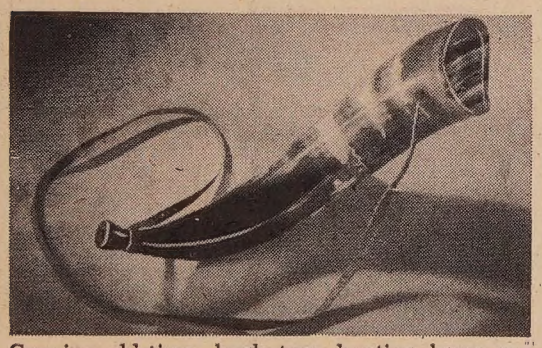
All products shown here may be obtained directly from indicated sources. Send check or money order with your order. Manufacturer will refund full purchase price on prompt return of unused, non-personalized items. This department is not composed of paid advertising.



The space age is the rage in stamps, too! A spectacular array of genuine foreign postage stamps, picturing the exciting new developments of the space age, will captivate you. All these new issues plus a wonderful collection of 230 other colorful all-different stamps from five continents. For 25¢ ppd. H. E. Harris, Dept. AM, 4451 Transit Bldg., Boston, Mass.

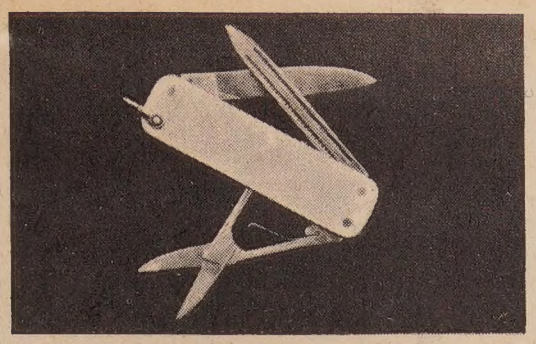


You'll write yourself a "thank-you" for having these wonderful instructions on "Letters For All Occasions." Includes over 300 model letters on inquiry, congratulations, invitations, condolence, etc. Gives correct form, punctuation and spelling for *all* types of correspondence—business or social. $1.50 ppd. Griffin Pub., 1170-A B'way, N.Y.

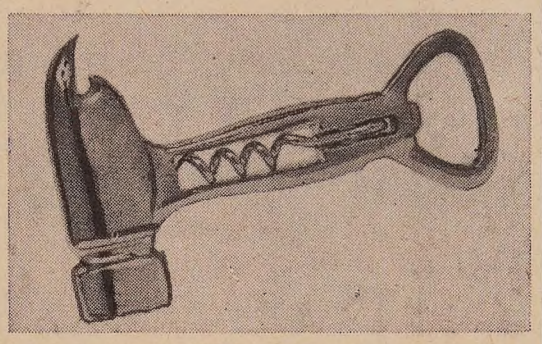


Genuine old-time, bugle-type hunting horns are crafted from select steer horns. Imported, horns are hand-polished and come equipped with rawhide shoulder thong. You don't see too many of these today, and this one is a real beauty. Measures a full 18" along the curve. $3.95 ppd. Arms & Weapons, 40 East 40th St., N. Y. 16.

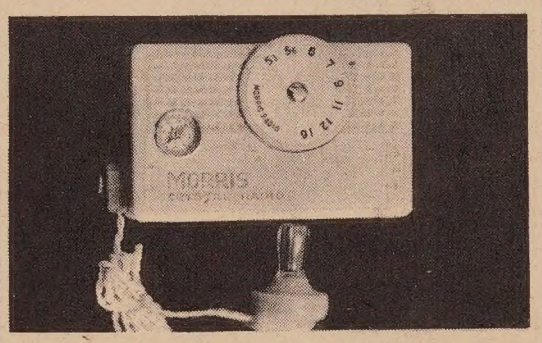
You've heard the expression, "funny as a three dollar bill." Now's the chance to prove one really exists—it does in the form of these Republic of Texas $3 bills issued in 1836. Be a big tipper with this bankroll of threes. Great fun. Limited supply. $1000 in $3 bills, $1.98 ppd. Banner Supply, 1308-B Lincoln Bldg., N. Y. 17.



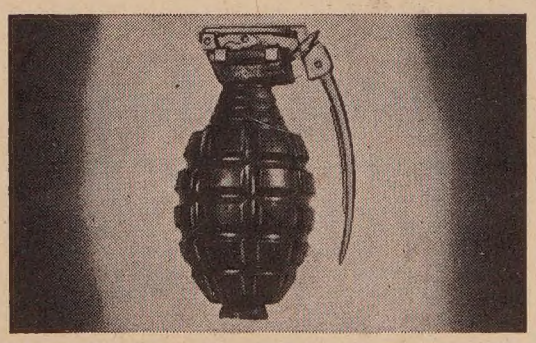
This sharp beauty is one of the nicest things we've seen in some time. Has impressive 2" knife blade, nail file and scissors. Makes a beautiful gift, too, with simulated mother-of-pearl handle. Perfect for the man always on the go. Produced by Italian craftsmen. $2 ppd. Order from Hollis Company, 1133 Broadway, New York 10, N. Y.



Are you a frustrated misplacer of bar tools? Well, you don't have to be any more with this bartender's dream. Called 6-in-1 Bar Buddy, it's a great combination of bottle opener, corkscrew, can opener, ice crusher, olive pick and pacifier. Heavy gold-finished metal and plenty sturdy. Good door-prize idea. $1 ppd. Charles Co., Dept. AM, 257 Fourth Ave., N. Y. 10.



Mighty fine listening you'll have with pocket-size Mighty Mite—great Germanium diode crystal radio. Needs no batteries! Goes with you to ball park, camping trips—anywhere you go. With speaker that fits ear so only you can hear. Complete with speaker, groundwire and antenna for $4.95 ppd. Big Three Ent., Dept. AM, 1109-6th Ave., N. Y.



It's a live one! No doubt you recognize this baby—yep, a grenade alright. An exact replica of a U. S. Army hand grenade, goes off 4 seconds after pulling firing pin. Uses standard caps. You and your friends will get a bang out of this. Can be used over and over. $2.23 ppd. Standard American Suppliers, Dept. AM-10, 1 Park Ave., N. Y.

HOW ABOUT THAT! 5-for-1 sale of slam-bang sports movies!

5 sensational shows!

1. AFRICAN BIG GAME
2. COBRA-MONGOOSE FIGHT
3. MAN-EATER: SHARK FISHING
4. CROCODILE-TIGER BATTLE
5. HUNTING WHALES

Order now! Special limited introductory offer for new fans only. Money back guarantee.

TREASURE FILMS
P. O. Box 1215
Sherman Oaks 10 Calif.

5 Sports MOVIE SUBJECTS

all 5 only $2.00 8mm

$4 for 16mm.

It's the greatest sports movie bargain ever! Your choice of a lifetime to get five no-holds-barred sports action subjects for less than the price of one.

GENUINE IMPORTED
ITALIAN STILETTOS

WOLF KILLER!

T. R. Moscow, Idaho reports: *"Wolf freed himself from one of my traps just as I was approaching and attacked me. My gun was lost in the snow and only your fine Stiletto knife saved me from possible serious injury."*

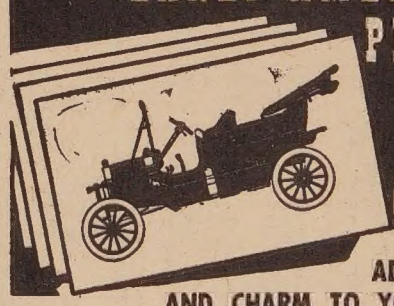
Giant Italian Stilettos are dependable and effective as T. R. reports. Heavy steel blade, bone handle. Locks in open position.

Choose small (5-9/16" open) . . . $5.50, Regular (7-1/16") . . . $5.95, Mammoth (11") . . . $7.50, COLOSSAL (13¼") . . . $8.95. Send cash, check or M. O. Sorry no C.O.D.'s. Satis. Guaranteed.

The above are offered for sale only to persons and firms outside California.

SEAPORT TRADERS INC.
Dept. AG-2,
409 E. 12th Street, Los Angeles 15, California

★ ★ EARLY AMERICAN PRINTS *in* FULL COLOR



ADD BEAUTY AND CHARM TO YOUR HOME

These thrilling authentic reproductions are ready to frame for your den, study, living room, etc. All different, all beautifully accurate in every detail. Size 8½" x 5½", they're reg. $3.50 each set. Order now at our LOW, SPECIAL PRICE.

Any complete set of 8 PRINTS Only $1.00 ppd. Sorry No C.O.D.

Choose Any One or More of These Three Sets
A. AUTOMOBILES B. FIRE ENGINES C. LOCOMOTIVES

QUALITY BAZAAR, Bx. 693, Gd. Cent. Sta., N.Y. 17
Enclose $.... ( ) Check, ( ) M.O. you pay postage.
Please send me: ( ) A, ( ) B, ( ) C
(Check letters desired)
NAME.....
ADDRESS.....
CITY.....STATE.....

SECRET HIDE-A-WAY DAGGER

In all appearances it looks like a fine riding crop, yet within its rich golden leather wrappings lies a deadly 18" steel pick. This miniature version of the sword cane is a rare find, a practical weapon. Measures 26" overall. Only $3.95 postpaid. Send cash, check or M.O. Sorry no COD's. 10-day money back guarantee.
SEAPORT TRADERS, Inc., 409 E. 12th St., Dpt. AG-2, L.A. 15, Cal.

Just Imagine! MY STORY IN THIS MAGAZINE...

Who'd have thought when I wrote to the folks at Vitasafe that they would actually print *my* letter in their ads! Yes, they told me that my story was so typical of the many letters they received, they wanted to publish it. My husband and I agreed — so here it is.

He Didn't Even Kiss Me Goodnight!

Posed by professional models.

NIGHT after night my husband came home from work all tired out. He was nervous, irritable — and barely touched supper. Most of the time he'd just sit around for a while — then drop into bed, asleep as soon as his head hit the pillow. Often he didn't even kiss me goodnight . . . and yet I knew I had a good man — one who really loved me.

I know a man's tired after a day's work — but my husband was simply "dead on his feet"! You'd think he'd forgotten all about me!

Then one day we saw a Vitasafe ad in a magazine. It told about other men like my husband who had once felt tired and run-down, who had lost their pep and energy. It said that this condition may be caused by an easily corrected vitamin-mineral deficiency, and that thousands of people had experienced a feeling of increased vitality and strength through the famous Vitasafe Plan. It offered to send a trial 30-day supply of powerful Vitasafe High-Potency Capsules so we could discover for ourselves whether my husband could be helped.

We had nothing to lose, so we sent the coupon. And believe me, it was the smartest thing we ever did. Now my husband's like a new man. He feels stronger and peppier than he has for a long time!

If you want to help someone you love get rid of that tired, run-down feeling, due to a vitamin-mineral deficiency, send for a 30-day trial supply of Vitasafe capsules as we did. Just mail the no-risk coupon *today*.

EACH DAILY VITASAFE CAPSULE FOR MEN CONTAINS

Choline Bitartrate	31.4 mg.	Niacin Amide	40 mg.
Inositol	15 mg.	Calcium Pantothenate	4 mg.
dl-Methionine	10 mg.	Vitamin E	2 I.U.
Glutamic Acid	50 mg.	Folic Acid	0.5 mg.
Lemon Bioflavonoid Complex	5 mg.	Calcium	75 mg.
Vitamin A	12,500 USP Units	Phosphorus	58 mg.
Vitamin D	1,000 USP Units	Iron	30 mg.
Vitamin C	75 mg.	Cobalt	0.04 mg.
Vitamin B_1	5 mg.	Copper	0.45 mg.
Vitamin B_2	2.5 mg.	Manganese	0.5 mg.
Vitamin B_6	0.5 mg.	Molybdenum	0.1 mg.
Vitamin B_{12}	2 mcg.	Iodine	0.075 mg.
		Potassium	2 mg.
		Zinc	0.5 mg.
		Magnesium	3 mg.

We invite you to compare the richness of this formula with any other vitamin and mineral preparation.

SPECIAL PLAN FOR WOMEN ALSO AVAILABLE. CHECK COUPON IF DESIRED

25¢ just to help cover shipping expenses of this

FREE 30 days supply High-Potency Capsules

LIPOTROPIC FACTORS, VITAMINS AND MINERALS

Safe nutritional formula containing 27 proven ingredients: Glutamic Acid, Choline, Inositol, Methionine, Citrus Bioflavonoid, 11 Vitamins (including blood-building B-12 and Folic Acid) plus 11 Minerals.

To prove to you the remarkable advantages of the Vitasafe Plan . . . we will send you, without charge, a 30-day free supply of high-potency VITASAFE C.F. CAPSULES so you can discover for yourself how much stronger, happier and peppier you may feel after a few days' trial! Just one of these capsules each day supplies your body with over *twice* the minimum adult daily requirements of Vitamins A, C, and D . . . *five times* the minimum adult requirement of Vitamin B-1 and the *full concentration* recommended by the Food and Nutrition Board of the National Research Council for the other four important vitamins! Each capsule contains the amazing Vitamin B-12 — one of the most remarkable nutrients science has yet discovered—a vitamin that actually helps strengthen your blood and nourish your body organs.

Glutamic Acid, an important protein derived from natural wheat gluten, is also included in Vitasafe Capsules. And to top off this exclusive formula, each capsule now brings you an important dosage of Citrus Bioflavonoid. This formula is so complete it is available nowhere else at this price!

POTENCY AND PURITY GUARANTEED

There is no mystery to vitamin potency. As you probably know, the U.S. Government strictly controls each vitamin manufacturer and requires the exact quantity of each vitamin and mineral to be clearly stated on the label. This means that the purity of each ingredient, and the sanitary conditions of manufacture are carefully controlled for your protection! When you use VITASAFE C.F. CAPSULES you can be sure you're getting exactly what the label states . . . *pure* ingredients whose beneficial effects have been proven time and again!

WHY WE WANT YOU TO TRY A 30-DAY SUPPLY — FREE!

We offer you this 30-day free trial of valuable VITASAFE C.F. CAPSULES for just one reason. So many persons have already tried them with such astounding results . . . so many people have written in telling us how much better they felt after only a short trial . . . that we are absolutely convinced that you, too, may experience the same feeling of improved well-being after a similar trial. In fact, we're so convinced that we're willing to back up our convictions with our own money. *You* don't spend a penny for the vitamins! A month's supply of similar vitamin capsules, if it were available at retail, would ordinarily cost $5.00.

AMAZING PLAN SLASHES VITAMIN PRICES ALMOST IN HALF

With your free 30-day supply of Vitasafe High-Potency Capsules you will also receive complete details regarding the benefits of an amazing new Plan that provides you regularly with all the factory-fresh vitamins and minerals you will need. *You are under no obligation to buy anything!* If after taking your free capsules for three weeks you are not entirely satisfied, simply return the handy postcard that comes with your free supply and that will end the matter. Otherwise it's up to us — you don't have to do a thing — and we will see that you get your monthly supplies of capsules *on time* for as long as you wish, at the low, money-saving price of only $2.78 per month (plus a few cents shipping) — *a saving of 45%*. Mail coupon now!

SPECIAL PLAN FOR WOMEN

Women may also suffer from lack of pep, energy and vitality due to nutritional deficiency. If there is such a lady in your house, you will do her a favor by bringing this announcement to her attention. Just have her check the "Women's Plan" box in the coupon.

®"Vitasafe" Reg. T.M.

VITASAFE CORP.
43 West 61st Street, New York 23, N. Y. G-66

Yes. I accept your generous no-risk offer under the Vitasafe Plan as advertised in

Send me my FREE 30-day supply of high-potency Vitasafe Capsules as checked below:

☐ Men's Plan ☐ Women's Plan

I ENCLOSE 25¢ PER PACKAGE for packing and postage.

Name.....

Address.....

City.....Zone.....State.....

This offer is limited to those who have never before taken advantage of this generous trial. Only one trial supply of each formula per coupon.

IN CANADA: 394 Symington Ave., Toronto 9, Ont. (Canadian Formula adjusted to local conditions.)

Mail Coupon To **VITASAFE CORP, 43 West 61st Street, New York 23, N. Y.**

or when in New York visit the VITASAFE PHARMACY, 1860 Broadway at Columbus Circle

IN CANADA: 394 Symington Ave., Toronto 9, Ontario

© 1958 Vitasafe Corp.

THIS CRAZY STUFF CAN MAKE YOU UP TO $500.00 PROFIT ON $20 WORTH OF MATERIALS

$1.00 BRINGS YOU $25.00

SENSATIONAL NEW HOME BUSINESS IN "VELVO-FINISH" SURFACING PAYS UP TO $15 & $20 AN HOUR

Yes, "crazy" is the RIGHT WORD. Microscopic cloth fibres, in rainbow colors, sprayed on like paint! Appears heavy as wet mud, actually light as goose down! Square foot of coverage costs 3c, LOOKS and FEELS like $15 a yard velvet! And PROFITS are crazy, too. Less than 50c worth of Velvo-Finish transforms the OLDEST beat-up radio or TV console into MAGNIFICENT DECORATOR'S PIECE. A bargain in re-finishing at $10, and you can do 3 to 4 such $10 jobs in ONE HOUR!

Are you tired of being told *what* to do, *when* to come to work—perhaps when to *stay home* (without pay!) when work is scarce? Would you like to *walk out* on all this, and start piling up the big profits *for yourself?* If you are really in earnest, here is your once-in-a-lifetime opportunity to do it.

START IN SPARE TIME
Enjoy 2 INCOMES AT ONCE!

A corner of garage, basement, or service porch is room enough to start. Do Velvo-Finishing evenings or weekends, and keep present job until you are "set." Profit from this *double income* in beginning, and *bank* the extra money — to buy a home, for a secure future, or to open your own *full-time business* when you are ready.

FREE SAMPLE
Mail Business Reply Card
No Postage Necessary

FLOK-KRAFT
New 'SPRAY-ON'
Velvo-Finish
Protects and Beautifies
METAL, WOOD, PAPER, GLASS
Anything at all!

BECOME EXPERT IN A FEW HOURS!

No previous experience or special skill needed. My complete illustrated instructions make it easy to *learn*, easy to do. Few hours of practice make you a professional. Some actually complete and deliver their first high-profit jobs within a *day or two* after materials arrive!

EARN UP TO $250 A WEEK

Of course, not *every* job pays $10 for 15 to 20 minutes work. And not *every* minute is productive. You must spend *some* time discussing orders with customers, preparing your materials, cleaning your tools. But profits are so *fantastic* that just a *few jobs a week* can bring in $200 or more. I show you *exactly what to do* to get these big-pay orders rolling in!

ORDERS COME FROM HOMES, STORES, FACTORIES, RESTAURANTS, ETC.

Prospects for Velvo-Finish are behind almost *every door*. Illustrations here show only few from *hundreds* of uses. Cover bottoms of lamps, ash trays, pottery, to prevent scratching tables. Beautify old book cases. Put green game-room tops on card tables. Make and sell your own Xmas cards and toys *by mail order* (I show you how). Line trunks, compartments of new and used cars with this velvet-soft finish to protect luggage *(tremendous* market here!). And many more. Instructions include *scores* of money-making ideas like these.

ENJOY REAL PROSPERITY IN GOOD TIMES OR BAD

Velvo-Finish *saves* money by renewing and beautifying *old* articles so *your* trade often *picks up* when other business is in a slump. Do you ever worry about losing your job? Change that with a *year-round* big-profit business of your own! Buy the nice home and fine car of your dreams. Have money and time for *several* vacations a year. Plan a *better* education for your children. Velvo-Finish can do *all* this . . . and *more!* Start by mailing the Coupon *TODAY* for big FREE packet – samples, ideas, business plans, full details.

RESERVE YOUR FRANCHISE TODAY! SURE!

OTHERS DO IT— SO CAN YOU!

$10,000 A YEAR!
"Earned $10,000 a year from spare-time start."
G. H., California

$13 AN HOUR!
"Got $52.50 doing auto trunks in 4 hours . . . earned $13 per hour."
J. O., Missouri

TOO MANY ORDERS!
"Getting orders faster than I can handle in spare time."
W. R., Wyoming

$100 JOB 1ST DAY!
"Got $100 job first day . . . promise of several more already."
C. H. E., Maryland

QUICK $100 ORDER!
"Got quick $100 order from store . . . lined up 5 others in 4 hours."
H. G. R., Wisconsin

NOTE: This new kind of Coupon-Business Reply Postcard requires no stamp or envelope. Write your name and address clearly on the lines provided—then clip and drop in mailbox. Nothing else to do. When we receive it, we will rush FREE USABLE SAMPLES, HOME BUSINESS BOOKLET and CONFIDENTIAL DETAILS to you by return mail absolutely Free.

FREE!

SAMPLES, 50 HOME-BUSINESS IDEAS BOOKLET AND CONFIDENTIAL DETAILS

Just write your Name and Address on Card–Cut Out –Mail. (Ignore printing on back) We pay postage.

CUT ON DOTTED LINE

YOUR NAME _____

ADDRESS _____

CITY _____ STATE _____

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY CARD
First Class Permit No. 20091, Los Angeles, Calif.

POSTAGE WILL BE PAID BY—

COAST INDUSTRIES (Information Mailing Dept.)

LOS ANGELES 61, CALIFORNIA

Dept. D-1,

NO CHARGE FOR FRANCHISES

MANY OPENINGS NOW, BUT GOING FAST

Don't delay. Be the *first* in your area to cash-in on this amazing development. Many firms with such a sensational money-making invention would charge *hundreds of dollars* just for the license to use it – but Velvo-Finish Franchises are FREE to those who act at once!

Expect $1000 a Month Profit Permanent – Big Future

Exciting profits today – even *bigger* earnings soon, as your reputation grows in the community. Don't stand idly by and watch someone else get the "gravy." Start NOW . . . *TODAY!*

Coast Industries, Dept. D-1, Los Angeles 61, California

Cash In Quick On New Shoe Craze!

We'll set you up in a Money-Making "Shoe Store Business" FREE! Just 8 Easy Orders a Day bring you up to $960 a month!

Want Plenty of Money? Just show young men, college or high school students America's newest, hottest shoe craze . . . Mason Kampus King. They go wild over colorful school letter or personal initial right on each shoe. You take easy orders —collect cash deposits—get big Bonuses and Prizes every month you work spare time or full time.

121 Exciting COLOR COMBINATIONS

Your customers choose from 121 different combinations of colors and letters. Ideal for schools, colleges, fraternities, bands, etc.

Mason Men have made big money for half a century—but now a whole new market is open to them. This exciting new shoe style can be your private "gold mine". No wonder the Kampus King sells on sight to organizations, marching units, students, and "hep" individuals. No wonder your first sale will start such an "endless chain" of sales and profits, because this is the kind of NEW IDEA young folks go for BIG!

You Offer 210 Fast-Selling Shoes and Jackets—Something for EVERY Man and Woman

Yes, here's a wonderful business for you, if you want to make really important money with a line you can sell to everybody—if you want steady cash profits every month. And you never invest one cent—we furnish everything FREE, so you can start raking in profits your very first hour! No rent to pay—no light bills, clerk hire or other overhead. You keep 100% of your profits!

Here's PROOF:

Ambitious man wanted in every town, to earn this kind of money! James Kelly took so many orders for these Nationally Advertised shoes he made $93.55 in ONE EVENING! Fred Mapes makes $5.00 to $10 every hour he devotes to his Mason Shoe Business. Charley Tuttle averages over $80 extra weekly in part time. How much do YOU want to make? It's up to YOU!

Stores Can't Compete

People PREFER to buy from you as the local Mason Shoe Counselor. You offer at-home or at-work convenience no store can match. Your customers get the size they want, because you draw on stock of over 250,000 pairs of dress, work, sport shoes in sizes from 2½ to 15—widths from extra-narrow AAAA to extra-wide EEEE. Famous Air-Cushion insole shoes give supreme comfort, so you get plenty of repeat orders and recommendations.

You make a LOT of money with amazing Ripple Sole shoes with revolutionary new kind of sole that has shock-reducing *gliding action*—forward thrust with every step.

EVERYTHING FURNISHED FREE!

We'll furnish your complete Starting Outfit FREE! Just rush coupon. It brings you—FREE and POSTPAID—*everything* you need to take profitable orders for Kampus King Shoes—sensational Ripple Sole Shoes—insulated Jackets & Boots—Sylflex Shoes—work shoes —210 in all! You can start with Mason in Spare Time, switch over to full time when you like. Get your own and family's shoes wholesale! You can't go wrong—so send the coupon now!

• 30 kinds of work shoes! A style for every trade! Special Neoprene, Cork, Cushion soles, heels . . . ventilated work shoes . . . even Safety Toe Shoes!

• Smart dress, sport styles! The last word in styling! Many fine, unusual leathers. Cool Nylon Mesh styles, moccasins, 2-tones and Cush-N-Crepe soled shoes!

• 70 Styles for Women! Satisfy almost every taste! Many comfort features. Low-heeled, high-heeled, casuals, service shoes, latest styles!

MASON SHOE MFG. CO.

Dept. F-345, Chippewa Falls, Wisconsin

FREE SELLING OUTFIT

Mr. Ned Mason
Mason Shoe Mfg. Co., Dept. F-345
Chippewa Falls, Wisconsin

OK, Ned! I want to make extra spare time money fast—up to $960 a month for 8 orders a day. Rush EVERYTHING I need to start—FREE and POSTPAID!

Name.....

Address.....

Town.....State.....